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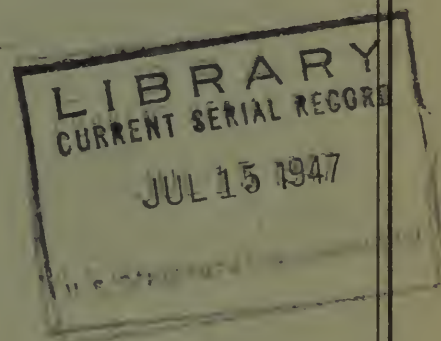
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FARM CREDIT ADMINISTRATION
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.

FROZEN FOOD LOCKER
COOPERATIVES
IN ILLINOIS
1946

By
PAUL C. WILKINS
and
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COOPERATIVE RESEARCH AND SERVICE DIVISION

In Cooperation With the
St. Louis Bank for Cooperatives
St. Louis, Missouri

UNITED STATES DEPARTMENT OF AGRICULTURE
FARM CREDIT ADMINISTRATION
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SUMMARY AND CONCLUSIONS

The year 1945-46 was one of increased activity and greater volume of business for the Illinois frozen food locker cooperatives. Several new associations were organized during the year and new plants were constructed.

Briefly, the highlights of this study are:

1. Total assets of the 32 associations covered by the study amounted to over \$1,800,000. Investment in fixed assets was over \$1,400,000. Net worth of the associations totaled approximately \$1,120,000, of which 86 percent is made up of capital stock and 14 percent of retained net savings. Total assets per association increased approximately 30 percent over last year. The investment in fixed assets for the 71 plants is approximately \$48.60 per locker.
 2. Revenue averaged \$26,219 per association or \$25.66 per locker rented. This represented an increase of \$2.57 per locker over the previous year. Forty-seven percent of revenue was derived from locker rentals; 31 percent from cutting, wrapping, freezing, and grinding; 15 percent from additional processing services such as slaughtering, curing, smoking, lard rendering, poultry processing, and fruit and vegetable processing; and 7 percent from sales, grading, storage, and other sources.
 3. Expenses averaged \$23,495 per association or \$22.99 per locker rented. Labor, utilities, and depreciation are the three major expense items in locker-plant operation - amounting to almost three-fourths of all expenses. The cost of labor and management accounted for 50 percent of all expenses and amounted to 45 percent of total revenue.
 4. Net savings averaged \$2,724 per association or \$2.67 per locker rented. This represents an increase of approximately 30 percent per locker rented, over the previous year. In general, the larger net savings resulted from greater volume of product processed, addition of new processing services, and increased efficiency of labor and management. Net savings before payment of income tax and interest averaged 10 percent of the original cost of fixed assets as compared with 7.9 percent in 1945.
- Associations operating large single plants or a central processing plant with branches had greater earnings than the average single-locker-plant association. This appears to indicate a need for either centralized processing departments, or, if each plant is to remain a complete plant, of enlarging the size of the plants so that greater efficiency can be obtained through the handling of larger volume.
5. Meat and poultry processed amounted to 6,955 tons and averaged 425 pounds per locker rented. For the preceding year the average per locker rented was 384 pounds. Fruits and vegetables averaged about 25 pounds per locker rented with 85 percent of the volume in the months of June, July, and August.
 6. Labor and management cost when compared with processing income shows considerable improvement over the preceding year. In this study the cost of labor and management was 92 cents per dollar of processing income while last year the cost was \$1.01 per dollar of processing income.

The study indicates that volume alone does not guarantee high earnings unless it is associated with efficient utilization of labor.

7. Power consumption per locker increased 13 percent over the preceding year or from 59 kilowatt-hours per locker to almost 67 kilowatt-hours. This may be due to a number of factors such as greater volume chilled and frozen, deterioration of insulation, decreased efficiency of refrigeration equipment, or possibly a higher average outside temperature than the preceding year.

While the associations showed considerable improvement over the preceding year, it would be worth while to consider some of the problems they may face in the next few years.

During the war and since locker plants have benefited from an unusual and somewhat artificial demand owing to meat shortages and rationing. Competition has been relatively weak and, to a large extent, locker plants have operated in a seller's market. The end of this period is approaching. Within the next few years the locker associations will be faced with high construction and operating costs and with much keener competition from meat packers, retail stores, other locker plants, and home units.

There is danger in some areas that locker plants, through increased rentals and processing charges, may price themselves out of the reach of some patrons and will have difficulty in keeping plants operating to capacity. Rather than rely upon high charges, locker plants should bend their efforts to increase patrons' use of locker service and so reduce the unit cost to patrons through increased volume.

The rapid increase in the cost of plant facilities should concern those contemplating expansion or new plants. In most cases the increased cost of plant facilities must be accompanied by an increase in locker rental rates and processing charges. There is danger that a substantial increase in rates will wipe out much of the economy to the patron in this method of food processing and preservation. On the other hand the increased cost of plant facilities without an increase in rates will drastically reduce net savings through increased insurance, taxes, depreciation, and interest.

The successful locker plant of the future will be one that improves and expands its services along such lines as slaughtering, curing, smoking, lard rendering, sausage making, dressing of poultry, and processing of fruits and vegetables.

In addition to these services, the up-to-date locker plant should be in a position to store and distribute commercial frozen foods not only to locker patrons but to home-unit owners, retail stores, hotels, and restaurants. Others may find it worth while to manufacture and sell ice cream to patrons and others. Some plants suitably located may also find they can make additional savings by processing and freezing local surpluses of fruits, vegetables, and poultry on a commercial basis. Others may carry on custom slaughtering and dress poultry for retail stores. Still another potential source of revenue and savings is more efficient utilization of inedible products through the joint operation of a few rendering plants.

Opportunities for improved and expanded services through locker-plant operation appear bright, provided the operations are efficient and result in satisfactory service at moderate cost.

FROZEN FOOD LOCKER COOPERATIVES IN ILLINOIS, 1946

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The frozen food locker industry in the United States represents one of the most rapidly expanding developments of small business enterprises in the last decade. While it had its start in a small way as long as 30 years ago on the Pacific coast, the major development has taken place since the middle 1930's.

On July 1, 1946, there were approximately 8,000 plants in operation representing an estimated investment of 180 million dollars and with an annual gross income of about 90 million dollars. These 8,000 plants had a capacity of approximately 4 million lockers capable of processing and storing about 1,400,000,000 pounds of food for 3-1/3 million families, 73 percent of which are farmers.

Illinois ranks second in the number of cooperative frozen-food locker plants of the Nation with about 12 percent of the total. The first cooperative plant in the State was opened at Amboy in 1936. Since this beginning more than 100 cooperative plants have been established. Plans are now underway for additional plants this year.

This survey, made at the request of the Illinois Cooperative Locker Service, is based on analysis of the business of 32 associations operating 71 plants having total assets of \$1,800,000 and combined annual business of over \$830,000.

The survey covers the operation of the associations for their respective fiscal years ending between October 31, 1945, and September 30, 1946. Two new associations ended their first fiscal year of operation after the close of the survey. They were, however, included in the study.

The 32 associations operated 58 complete plants having an average capacity for 560 lockers and 13 branch plants with an average capacity for 212 lockers. At the close of their fiscal years the 71 complete and branch plants had capacity for an estimated 35,214 lockers.

All associations had facilities for chilling, aging, cutting, wrapping, freezing, and grinding beef and pork. Twenty-three associations provided pork-curing facilities, 19 lard-rendering facilities, and 5 slaughtering facilities. A number of associations had slaughtering facilities under construction. Several associations not equipped for slaughtering provided personnel to perform this service on the farm. Other associations not equipped to cure pork and render lard contracted for these services with other concerns.

NOTE: The authors express their appreciation to Etta C. Emmons for her assistance in the preparation of this report.

PURPOSE OF ANALYSIS

The purpose of this analysis is to provide the directors of the locker associations, the plant managers, and others responsible for and interested in cooperative locker-plant operation with information on the operations of the associations and data on the relative efficiency and success of the comparable associations and the individual plants.

The balance sheets are analyzed to show the relative financial position of each association. The composite income and expense statement is compared with the previous year's operation while a detailed analysis of income and expense covers the various sources of revenue and the major items of expense in an attempt to determine weaknesses in operations.

Net savings are compared with gross income and investment in fixed assets as a measure of successful operation.

Variations in depreciation rates are discussed briefly to show the need for more uniform depreciation rates and the effect of such variations on a comparative analysis of expense and net savings.

Data on volume of meats, poultry, fruits, and vegetables processed by the associations are shown as a measure of plant utilization.

Labor costs are compared with processing income on a monthly basis for individual plants in order to show the relative efficiency of labor as well as the need for more steady volume throughout the year.

Power consumption is analyzed on a monthly basis to point out the wide variations among plants as well as variations in monthly power consumption.

ASSETS, LIABILITIES, AND NET WORTH

Table 1 shows the assets, liabilities, and net worth of the individual associations. Total assets amount to over \$1,800,000, of which \$1,418,181 - or 77 percent - is represented by investments in fixed assets. Investments in United States Government bonds and securities, stock in the St. Louis Bank for Cooperatives, and stock in other cooperatives amount to \$40,175, or less than 3 percent of total assets. Current assets account for 19 percent and other assets for 2 percent. (See fig. 1.)

The funds for financing the locker associations are obtained primarily from the sale of capital stock. At the time of the survey 52 percent of all funds were represented by capital stock. Borrowed capital, the second largest source of funds, amounts to 13 percent. Of the 32 associations covered in this study, 13 reported no borrowed capital. Eight associations have borrowed capital amounting to over 30 percent of total funds, while 3 associations reported retained net savings greater than total borrowed capital.

Prepaid locker rentals is one of the major sources of operating capital for the associations, averaging \$6,120 per association. One association reported no deferred locker rentals, while in another association this was the source of over 20 percent of its funds at the close of the year.

FIGURE 1

AVERAGE FINANCIAL CONDITION OF ILLINOIS COOPERATIVE ASSOCIATIONS OPERATING 4 OR MORE YEARS, 1942-43 TO 1945-46

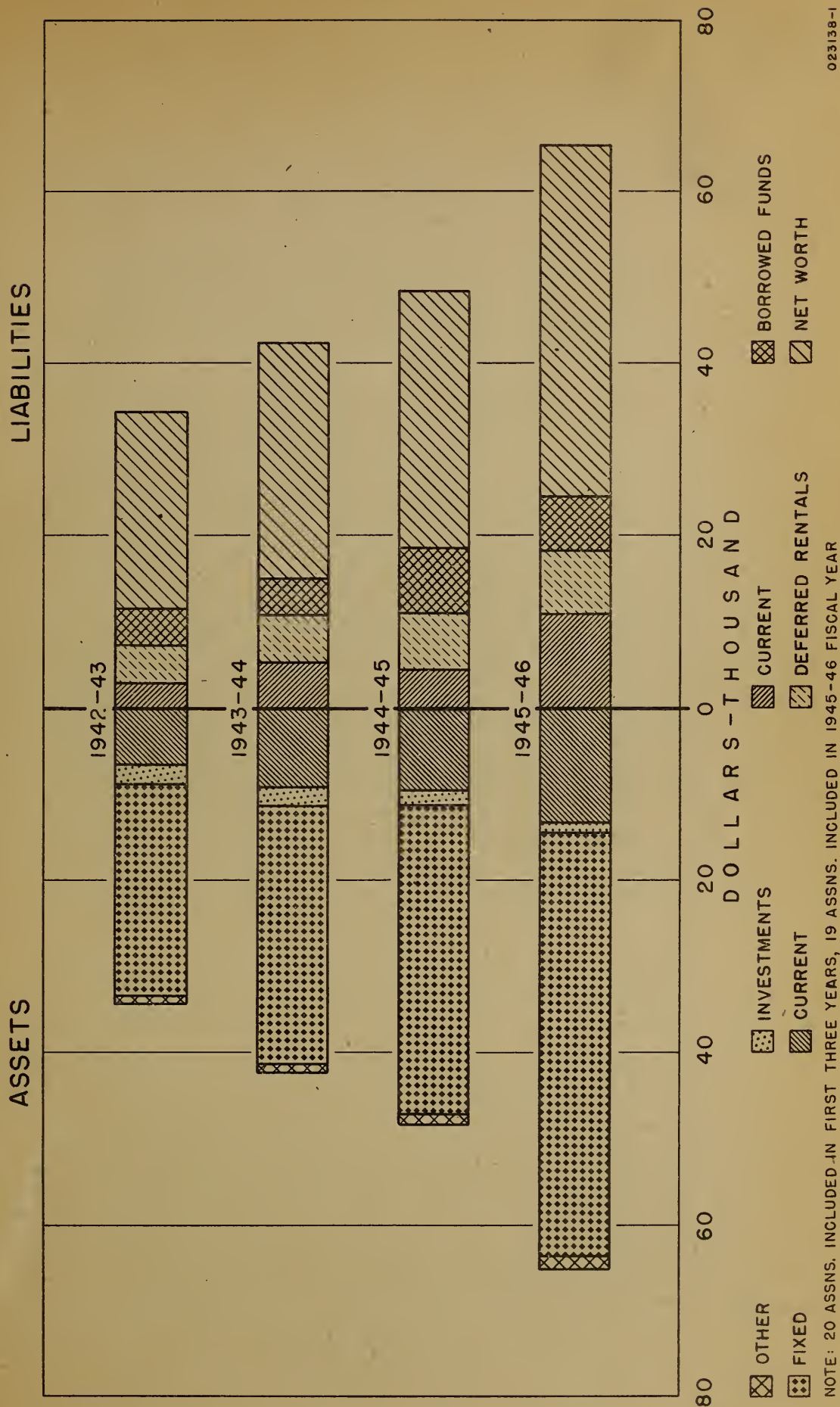


Table 1. - Comparison of assets, liabilities, and net worth of 32 Illinois cooperative locker associations

ASSN. (CODE NO.) ^a	ASSETS				TOTAL	LIABILITIES AND NET WORTH					TOTAL
	CURRENT ASSETS	INVEST- MENTS	FIXED ASSETS ^b	OTHER ASSETS		CURRENT LIABILITIES ^c	UNEARNED LOCKER RENTALS	BORROWED CAPITAL	CAPITAL STOCK	RETAINED NET SAVINGS	
1.....	\$18,804.95	\$1,260.00	\$41,013.88	\$1,035.49	\$62,114.32	\$4,006.85	\$10,258.53	-	\$37,725.00	\$10,123.94	\$62,114.32
2.....	17,802.78	1,500.00	69,697.23	4,596.87	93,596.88	13,635.87	15,081.17	\$8,100.00	37,150.00	19,629.64	93,596.88
3.....	17,366.97	2,125.00	104,871.63	2,824.48	126,988.08	46,328.00	10,006.51	18,936.98	46,750.00	4,966.59	126,988.08
4.....	2,447.01	550.00	18,783.08	803.89	22,583.98	726.74	-	-	21,325.00	532.24	22,583.98
5.....	14,940.54	2,175.00	120,997.10	1,214.32	139,326.96	11,334.74	14,113.20	18,200.00	87,568.52	8,110.54	139,326.96
6.....	22,809.08	550.00	18,241.31	1,116.27	42,716.68	3,076.34	6,761.42	-	25,525.00	7,353.90	42,716.68
7.....	2,424.58	1,150.00	26,778.15	429.05	30,781.76	5,074.78	5,324.92	-	15,700.00	3,782.08	30,781.76
8.....	15,170.74	155.51	59,520.43	579.37	75,426.05	11,640.52	11,263.00	-	42,925.00	9,597.53	75,426.05
9.....	5,844.96	550.00	15,776.89	447.96	22,619.81	5,434.43	1,421.00	-	13,200.00	2,564.38	22,619.81
10.....	7,428.78	150.00	66,027.41	665.84	74,272.03	20,647.91	10,322.94	10,147.19	24,600.00	8,553.99	74,272.03
11.....	6,641.31	350.00	33,258.81	1,899.38	42,149.50	10,072.42	4,153.00	380.00	20,775.00	6,769.08	42,149.50
12.....	5,440.28	575.00	47,749.80	1,871.49	55,636.57	4,261.26	8,551.00	4,999.19	34,000.00	3,825.12	55,636.57
13.....	4,538.07	925.00	17,392.19	935.11	23,788.37	2,841.91	4,810.23	4,043.50	8,250.00	3,842.73	23,788.37
14.....	67,243.36	4,126.00	115,779.11	2,843.49	189,991.96	42,607.46	12,482.74	34,650.00	97,400.00	2,851.76	189,991.96
15.....	9,458.01	10,608.20	9,120.67	447.78	29,634.66	4,628.78	2,701.35	-	8,725.00	13,581.55	29,634.66
16.....	6,460.70	50.00	4,636.80	728.66	11,876.16	976.98	1,958.64	-	7,675.00	1,285.54	11,876.16
17.....	10,627.33	50.00	21,661.23	1,065.11	33,403.67	1,736.34	3,658.97	-	18,475.00	9,535.36	33,403.67
18.....	2,766.03	750.00	50,106.95	1,580.64	55,203.62	7,420.26	4,688.85	6,965.65	29,050.00	7,078.86	55,203.62
19.....	588.28	1,000.00	11,724.18	424.34	13,736.78	435.00	609.96	-	9,850.00	2,841.82	13,736.78
20.....	10,461.98	350.00	30,282.63	783.30	41,877.91	1,460.31	6,355.83	-	27,900.00	6,161.77	41,877.91
21.....	6,427.84	-	37,276.31	975.51	44,679.66	13,513.66	2,785.34	18,773.46	6,960.00	2,647.20	44,679.66
22.....	1,963.03	1,150.00	34,955.16	911.98	38,980.17	2,702.97	3,282.77	12,011.67	21,400.00	(417.24)	38,980.17
23.....	14,764.38	1,850.00	89,345.32	2,242.17	108,201.87	10,230.04	9,400.36	12,179.81	64,500.00	11,891.66	108,201.87
24.....	4,060.23	1,950.00	69,297.69	997.81	76,305.73	7,136.30	10,672.26	21,564.62	35,675.00	1,257.55	76,305.73
25.....	43,082.46	1,400.00	45,385.60	1,454.40	91,322.46	5,150.51	12,679.77	15,457.93	54,850.00	3,184.25	91,322.46
26.....	4,631.91	1,100.00	34,427.31	697.08	40,856.30	3,109.48	767.67	9,595.89	21,375.00	6,008.26	40,856.30
27.....	2,986.37	-	22,167.98	376.66	25,531.01	6,302.29	4,128.98	-	15,975.00	(875.26)	25,531.01
28.....	3,456.99	550.00	23,943.36	494.11	28,444.46	949.35	3,005.82	5,631.67	19,350.00	(492.38)	28,444.46
29.....	4,655.05	1,750.00	69,515.49	3,008.68	78,929.22	6,160.49	5,616.62	25,249.58	41,275.00	627.53	78,929.22
30.....	1,664.36	750.00	28,768.54	410.82	31,593.72	1,891.07	2,228.12	9,800.00	16,675.00	999.53	31,593.72
31.....	1,187.39	450.00	14,747.94	628.44	17,013.77	1,550.02	1,787.59	5,092.50	7,800.00	783.66	17,013.77
32.....	3,363.25	275.00	64,931.06	948.34	69,517.65	24,154.78	4,964.82	-	42,725.00	(2,329.95)	69,517.65
Total....	341,506.96	40,174.71	1,418,181.24	39,236.64	1,839,101.55	282,095.78	195,841.38	241,779.64	963,128.52	156,256.23	1,839,101.55
Average..	\$10,672.09	\$1,255.46	\$44,318.16	\$1,226.21	\$57,471.92	\$8,815.50	\$6,120.04	\$7,555.61	\$30,097.76	\$4,883.01	\$57,471.92

^aArabic numerals represent a county association and its plants.^bDepreciated value.*^cIncludes key deposit.

Source: Audit reports of the association for their full fiscal years ending between Oct. 31, 1945 and Sept. 30, 1946. Two new associations, 25 and 26, ended their first fiscal year after the closing date of this survey. They were, however, included.

Current liabilities averaged \$8,816 for the 32 associations. Retained net savings comprised 8.5 percent of total funds and averaged \$4,883 per association. (See table 1.) In association 15, retained net savings amounted to 46 percent of total capital; and in associations 2 and 17, retained net savings exceeded 25 percent. Associations 22, 27, 28, and 32 reported small deficits, thus impairing to some extent their capital stock. (See also fig. 2.)

AVERAGE FINANCIAL RATIOS

Comparison of average financial ratios between 20 associations studied in 1943, 25 associations in 1945, and 32 associations in 1946 shows the following:

<u>Ratio</u>	<u>1943</u>	<u>1945</u>	<u>1946</u>
1. Current assets to current liabilities	1 to 0.61	1 to 0.52	1 to 0.78
2. Current assets and deferred charges to current liabilities and unearned locker rentals	1 to 1.07	1 to 1.02	1 to 1.21
3. Fixed assets (cost) to capital stock	1 to 0.63	1 to 0.54	1 to 0.56
4. Fixed assets (book value) to total borrowed funds	1 to 0.18	1 to 0.23	1 to 0.23
5. Fixed assets (book value) to capital stock and retained net savings	1 to 0.92	1 to 0.82	1 to 0.79
6. Capital stock to retained net savings	1 to 0.18	1 to 0.21	1 to 0.16

COMPOSITE AND AVERAGE FINANCIAL STATEMENTS

BALANCE SHEET

The composite and average balance sheet (table 2) shows total assets of \$1,839,102, or \$57,472 per association. Of this total \$44,318 is represented by fixed assets after depreciation and \$1,256 by investments. Current assets averaged \$10,672 per association and deferred charges \$1,226.

Total liabilities averaged \$22,491 per association, with noncurrent liabilities accounting for \$8,022 of this sum. Unearned locker rentals averaged \$6,120 per association.

Total net worth averaged \$34,981 per association with capital stock outstanding of \$30,098 and net savings of \$4,883. Compared with the previous year, retained net savings increased by an average of \$285 per association.

FIGURE 2

NET WORTH REPRESENTED BY CAPITAL STOCK AND RETAINED NET SAVINGS, ILLINOIS COOPERATIVE LOCKER ASSOCIATIONS, 1945-46



Table 2. - Composite and average balance sheet for 32 Illinois cooperative locker associations, 1945-46.

ASSETS		TOTAL	AVERAGE	PERCENT	LIABILITIES		TOTAL	AVERAGE	PERCENT
Current assets:					Current liabilities:				
Cash on hand and in bank		\$258,366.86	\$8,073.96	14.05	Accounts payable		\$56,480.25	\$1,765.01	3.07
Accounts receivable - trade		57,892.29	1,809.13	3.15	Notes payable		79,134.35	2,472.95	4.30
Accounts receivable - other		3,038.30	94.95	.16	Taxes payable (soc. sec., State and local)		13,760.73	430.02	.75
Reserve for doubtful accounts		(3,676.94)	(114.90)	(.20)	Federal income tax payable		19,468.31	608.38	1.06
Merchandise inventory		25,292.95	790.40	1.38	Accrued expenses payable		13,465.28	420.79	.73
Advance funds - capital stock and locker rentals		593.50	18.55	.03	Dividends payable - preferred stock		31,540.32	985.84	1.71
Total current assets		341,506.96	10,672.09	18.57	Patronage refund payable		13,185.72	412.05	.72
Deferred charges:					Accrued interest		1,831.91	57.25	.10
Prepaid plant supplies and expenses		23,026.46	719.58	1.25	Advance funds and construction contracts payable		36,840.34	1,151.28	2.00
Prepaid insurance and bonding		15,342.84	479.46	.83	Reserve for expenses payable		1,449.87	45.31	.08
Other deferred charges		869.34	27.17	.05	Total current liabilities		267,157.06	8,348.66	14.52
Total deferred charges		39,238.64	1,226.21	2.13	Deferred income:				
Investments:					Unearned locker rentals		195,841.38	6,120.04	10.65
Stock - other cooperatives and St. Louis Bank for Cooperatives		28,616.51	894.27	1.56	Noncurrent liabilities:				
U. S. Government securities		11,558.20	361.19	.63	Notes payable		241,779.64	7,555.61	13.15
Total investments		40,174.71	1,255.46	2.19	Key deposit		14,938.72	466.84	.81
Fixed assets:					Total noncurrent liabilities		256,718.36	8,022.45	13.96
Leasehold improvements		32,666.63	1,020.83	1.78	Total liabilities		719,716.80	22,491.15	39.13
Land		56,083.21	1,752.60	3.05	Net worth				
Plant and equipment		1,623,590.62	50,737.21	88.28	Capital stock:				
Total		1,712,340.46	53,510.64	93.11	Issued and outstanding		963,128.52	30,097.76	52.37
Less: Reserve for depreciation		294,159.22	9,192.48	16.00	Retained net savings		156,256.23	4,883.01	8.50
Net book value		1,418,181.24	44,318.16	77.11	Total net worth		1,119,384.75	34,980.77	60.87
Total assets		\$1,839,101.55	\$57,471.92	100.00	Total liabilities and net worth		\$1,839,101.55	\$57,471.92	100.00

Source: Audit reports of the associations.

INCOME AND EXPENSE STATEMENT

The data presented in table 3 were assembled from the audit reports of the associations and cover the past 2 fiscal years of operation. Thirty-two associations are included in the 1945-46 analysis, 25 associations in the 1944-45 analysis. For this reason, only the data on average income and expense and the data presented in the column showing average increase and decrease in income and expense can be considered as of value in making comparisons.

The significant fact revealed by this comparison is the increased income from all services. Average total income per association increased \$4,291.30.

Meat and poultry processing showed the largest increase at \$2,605 over a year ago and represents 45 percent of total operating income as compared with 42 percent in 1945.

Locker rentals increased by \$1,183 but declined as a proportion of total income from 51 percent in 1945 to 47 percent in 1946. Fruit and vegetable processing showed only a small increase of \$85.64 and represented approximately the same percentage of operating income as last year. Merchandise sales also showed but a small increase over last year from \$300 to \$396 per association and represented less than 2 percent of total income. Inedible sales increased by \$144, representing 3.6 percent of total income or about the same as last year.

The composite analysis of expense indicates increasing cost of labor and management as was the case last year. Salaries and wages increased over \$2,222 per association, or from 44 percent to 46 percent of total income. The increase in this single expense item was more than 50 percent of the increased income from all sources.

Increasing cost of labor and management represent one of the most difficult problems facing locker plants. The proportion of total income paid out for labor and management has increased from 36 percent in 1941-42 to 46 percent in 1945-46.

In spite of increased costs of labor, utilities, supplies, depreciation, and transportation, however, the associations, because of expanded services and increased volume, showed an increase in net operating income from \$2,556 to \$3,609 per association.

Interest expense increased \$157 per association over last year, and Federal income tax \$134 per association. Net savings increased from \$1,959 per association to \$2,724, or from 9 percent to 10.5 percent of operating income.

ANALYSIS OF INCOME BY ASSOCIATIONS

Although the associations used the same basic accounting procedure, some variations occurred between them. In this analysis, however, every attempt was made to put all associations on a comparable basis.

Several associations were engaged in activities not related to their locker-plant operation. All income and expense realized from these "outside" operations were excluded so far as possible in this analysis.

Table 3. - Composite and average income and expense statement (comparative)^a Illinois cooperative locker associations, 1945-46 and 1944-45.

ITEM	FISCAL YEARS ENDING BETWEEN OCTOBER 31, 1945, AND SEPTEMBER 30, 1946 ^b				FISCAL YEARS ENDING BETWEEN AUGUST 31, 1944 AND JULY 31, 1945				AVERAGE INCREASE OR DECREASE
	TOTAL		AVERAGE	PERCENTAGE OF OPERATING INCOME	TOTAL		AVERAGE	PERCENTAGE OF OPERATING INCOME	
Income:									
Earned locker rentals.....	\$393,087.14	\$12,283.97	47.17	\$277,516.38	\$11,100.65	51.04	\$1,183.32		
Cut, wrap, freeze, and grind.....	261,695.47	8,177.98	31.40	172,606.54	6,904.26	31.74	1,273.72		
Lard render.....	21,489.71	671.56	2.58	8,833.24	353.33	1.62	318.23		
Cure and smoke.....	64,984.89	2,031.09	7.80	31,420.94	1,256.84	5.78	774.25		
Slaughter.....	16,796.54	524.89	2.02	7,912.23	316.49	1.46	208.40		
Poultry processing.....	8,106.73	253.34	.97	5,581.33	223.25	1.03	30.09		
Fruits and vegetables.....	15,703.80	490.73	1.88	10,127.31	405.09	1.86	85.64		
Inedible sales.....	29,569.43	924.05	3.55	19,499.41	779.98	3.59	144.07		
Merchandise sales.....	12,667.09	395.85	1.52	7,511.74	300.47	1.38	95.38		
Other plant income.....	9,217.60	288.05	1.11	2,746.27	109.85	.50	178.20		
Total operating income.....	833,328.40	28,041.51	100.00	543,755.39	21,750.21	100.00	4,291.30		
Expenses:									
Salaries and wages.....	379,182.58	11,849.46	45.50	240,877.11	9,627.08	44.26	2,222.38		
Power and light.....	73,911.19	2,309.72	8.87	48,608.59	1,944.34	8.94	365.38		
Heat and water.....	13,011.96	406.62	1.56	8,475.49	339.02	1.56	67.60		
Laundry.....	5,777.83	180.55	.70	3,972.04	158.88	.73	21.67		
Plant supplies.....	50,490.13	1,577.82	6.06	32,068.36	1,282.74	5.90	295.08		
Plant repairs.....	19,526.26	610.19	2.34	14,032.14	561.29	2.58	48.90		
Licenses and taxes.....	13,335.95	418.75	1.60	15,751.46	630.06	2.90	213.31		
Bonding and insurance.....	13,436.37	419.89	1.61	8,986.63	359.47	1.65	60.42		
Educational and promotional.....	8,285.41	258.92	.99	6,085.51	243.42	1.12	15.50		
Directors per diem, legal, and audit	16,934.92	529.22	2.03	11,320.74	452.83	2.08	76.39		
Office supplies and expenses.....	16,550.09	517.19	1.99	13,602.87	544.11	2.50	26.92		
Bad debts and losses.....	1,994.33	62.32	.24	1,048.02	41.92	.19	20.40		
Truck, auto, and mileage.....	9,525.45	297.67	1.14	7,306.22	292.25	1.35	5.42		
Depreciation and rent.....	91,828.70	2,869.65	11.02	65,145.62	2,605.82	11.98	263.83		
Other expenses.....	4,060.14	126.88	.49	2,777.06	111.08	.51	15.80		
Total operating expenses.....	717,851.31	22,432.85	86.14	479,857.86	19,194.31	86.25	3,238.54		
Net operating income.....	115,477.09	3,608.66	13.86	63,897.53	2,555.90	11.75	1,052.76		
Other income:									
Nonoperating and misc.....	5,674.69	177.33	.68	4,331.74	173.27	.80	4.06		
Total.....	121,151.78	3,785.99	14.54	68,229.27	2,729.17	12.55	1,056.82		
Other expenses:									
Interest.....	10,651.03	332.84	1.28	4,388.14	175.53	.81	157.31		
Federal income tax.....	23,324.17	728.88	2.80	14,871.34	594.85	2.73	134.03		
Total other expenses.....	33,975.20	1,061.72	4.08	19,259.48	770.38	3.54	291.34		
Net savings.....	\$87,176.58	\$2,724.27	10.46	\$48,969.79	\$1,958.79	9.01	\$765.48		

^a32 associations included in the 1945-46 analysis and 25 associations in the 1944-45 analysis.

^bTwo associations ended their first fiscal year after September 30, 1946. These associations, however, were included.

^cNet saving of 10.46 percent based on total operating income. In table 7, net savings of 10.39 percent is based on total gross income. Total gross income consists of operating income and nonoperating or miscellaneous income.

Source: Audit reports of the associations.

In table 4 income is presented on a per-locker-rented basis. The associations were grouped according to the rates charged for cutting, wrapping, freezing, and grinding and then arrayed according to net savings per locker rented. The average income for each processing service is the average for only those plants offering the service. Thus, the sum of the average income received for each separate service in each major grouping exceeds the total average income per locker rented. By treating the data in this manner the reader is better able to determine the relative importance of each processing service.

Average gross income for the 32 associations analyzed amounted to \$25.66 income per locker rented. The 4 associations charging \$2.50 per 100 pounds for "chill, cut, wrap, freeze, and grind," shown as group I in the table, averaged \$30.40 income per locker rented. The 21 associations charging \$2.00 per 100 pounds for these services, shown as group II, averaged \$25.62 per locker rented. The 7 associations charging \$1.50 per 100 pounds for these services, shown as group III, averaged \$22.00 per locker rented.

Locker rental income averaged 47 percent of gross income. (See fig. 3.) While this income is lower than that of last year, it represents the largest single item of total income. Rental income ranged from a low of \$9.68 in association 21 to \$13.88 in association 32. Locker rental income is actually the average rental rate for each association.

Income per locker rented from "cut, wrap, freeze, and grind" varied widely among the associations. In group I this source ranged from \$8.62 per locker rented in association 10 to \$11.45 in association 9. This entire group averaged \$10.41 for "cut, wrap, freeze, and grind" per locker rented. The high income association in this group, as well as of the entire 32 associations, was association 25 with an income of \$40.09 per locker rented. It was also second highest in net savings of all associations.

In group II "cut, wrap, freeze, and grind" income ranged from a low of \$5.52 for association 20 to \$13.76 for association 15. The average for the entire group for these services was \$7.90 per locker rented. A reason for substantially lower average income than group I was a lower processing rate, \$2.00 per 100 pounds, as well as a lower average rental rate than group I, \$11.94. Association 15 showed the second highest total income per locker rented, \$31.32, for group II and ranked first in net savings of all associations in all groups. This was partly due to the large volume of custom cutting and storing done by this association for outside patrons.

In group III the income from "cut, wrap, freeze, and grind" ranged from \$4.77 per locker for association 7 to \$7.56 for association 16. Average income for this entire group for this service was \$6.43 per locker rented. The explanation for this lower income was a lower rate, \$1.50 per 100 pounds, and lower rentals averaging \$11.80 per locker. In group III, association 12 showed the highest total income per locker. With the exception of association 19 the next best showing was made by association 12, which reported the highest total income as well as the second highest net savings for the group. On the other hand, association 19,

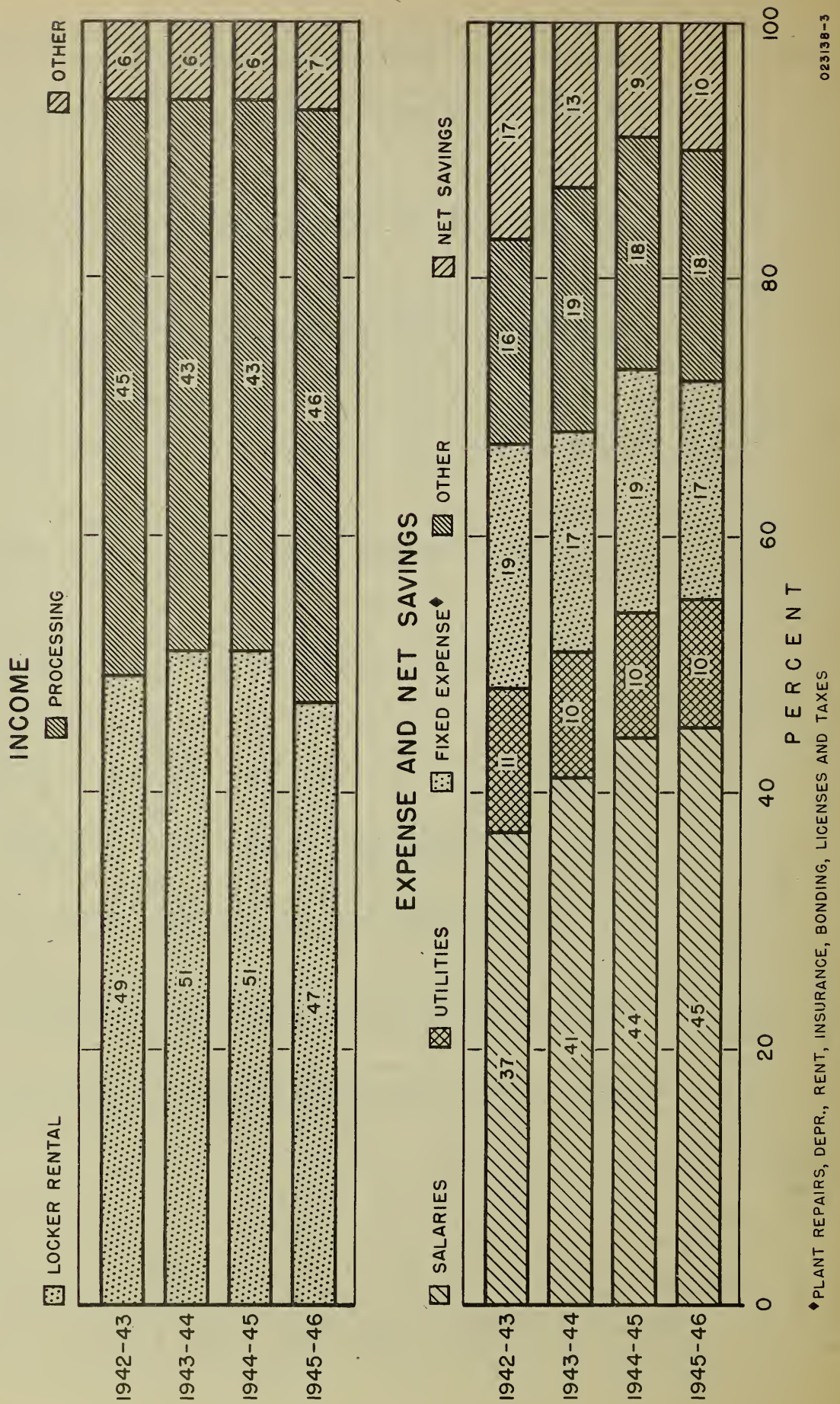
Table 4. - Comparative analysis of income per locker rented for 32 Illinois cooperative locker associations, 1945-46.

ASSOCIATION	EARNED LOCKER RENTALS	CUT, WRAP, FREEZE, AND GRIND	LARD RENDER	CURE AND SMOKE	SLAUGHTER	POULTRY	FRUITS AND VEGETABLES	CHILLING, STORAGE, GRADING, ETC.	INEDIBLE SALES	MERCHANDISE SALES ^a	OTHER INCOME	TOTAL INCOME
Group I ^b :												
25.....	\$13.15	\$11.16	\$1.41	\$5.95	-	\$0.55	\$1.05	\$2.15	\$2.59	\$0.95	\$1.13	\$40.09
9.....	12.40	11.45	1.55	2.93	\$0.56	.51	.42	.08	2.11	.07	.07	32.15
14.....	12.53	10.76	-	.06	2.04	.69	.51	.53	1.38	1.18	.42	30.10
10.....	12.67	8.62	-	.88	-	.74	.54	.07	.91	.21	(c)	24.64
Average.....	12.62	10.41	1.48	1.42	1.71	.66	.57	.56	1.53	.76	.36	30.40
Group II ^b :												
15.....	12.21	13.76	^d 6.2	2.17	^d .25	.23	.30	-	1.26	.45	.07	31.32
26.....	12.67	8.43	.90	2.82	-	.47	.62	-	.67	.30	.13	27.01
24.....	13.33	7.60	1.61	3.26	-	.48	.50	.98	1.02	.49	.01	29.28
20.....	12.52	5.52	-	-	3.71	(e)	1.01	.99	1.76	1.02	.01	28.54
18.....	12.33	8.29	1.32	3.25	-	(e)	.39	-	-	.97	.09	26.64
13.....	12.61	7.74	.96	3.15	-	(e)	.30	-	.62	.12	.05	26.66
8.....	12.60	5.89	-	^d .05	-	.30	.48	-	.75	-	.05	20.12
30.....	12.41	6.82	1.50	3.49	-	(e)	.75	2.25	.13	(.02)	.01	27.34
1.....	10.20	7.04	1.23	3.87	^d .01	.08	.40	.13	.70	.20	(c)	23.87
29.....	12.30	6.93	1.60	4.22	.52	(e)	1.34	-	.27	.18	.04	27.40
11.....	11.70	8.42	.97	4.22	-	(e)	.37	.03	.83	.20	.45	27.18
28.....	12.67	8.10	1.13	4.24	^b J	.30	.74	.18	1.13	.54	-	29.93
2.....	11.49	9.59	.70	2.97	-	.31	.17	.18	.70	.06	.15	28.32
23.....	10.57	7.82	-	1.89	-	(e)	.42	-	.34	.14	.13	21.31
31.....	12.67	7.38	1.18	-	-	.28	.36	.03	.45	.70	.10	23.15
21.....	9.68	8.57	1.27	1.00	2.08	(e)	1.02	.33	1.81	-	-	25.76
5.....	11.57	9.23	-	2.43	.27	.15	.46	-	2.70	.21	.13	27.15
3.....	13.00	6.42	.50	1.48	-	.29	.36	-	.61	.32	.09	23.08
22.....	12.67	6.86	4.49	-	5.52	.33	.27	-	1.18	.27	(c)	31.59
27.....	13.48	6.28	-	.81	^d .75	(e)	.63	1.79	-	.12	(c)	23.11
32.....	13.88	7.32	.13	2.84	-	(e)	.96	-	.06	.25	(c)	26.19
Average.....	11.94	7.90	1.10	2.67	1.12	.28	.49	.48	.90	.30	.13	25.62
Group III ^b :												
19.....	10.20	5.12	-	-	-	(e)	-	-	.76	-	.05	16.13
12.....	12.84	6.48	.80	1.22	1.37	.49	.96	.39	.77	.46	.23	25.81
17.....	12.00	7.47	^d .22	^d .08	-	(e)	.37	.27	.83	.24	.05	21.81
7.....	11.97	4.77	.21	^d .46	-	(e)	.17	.85	.59	.49	.07	19.58
6.....	12.00	6.28	.99	1.28	-	(e)	-	-	.64	.63	.05	21.87
16.....	10.33	7.56	-	^d .28	1.40	.55	.12	(.01)	-	1.14	1.02	22.59
4.....	10.80	7.23	-	1.74	-	(e)	.29	.08	.49	.27	.08	20.88
Average.....	11.80	6.43	.52	.90	1.39	.50	.48	.37	.69	.49	.18	22.00
Combined average...	12.02	8.00	1.00	2.11	1.31	.40	.50	.47	.97	.41	.18	25.66

^aIncome after deducting cost of sales.^bAssociations grouped according to rate charged per 100 pounds for chill, cut, wrap, freeze, and grind; group I, \$2.50; group II, \$2.00; group III, \$1.50. Exceptions: Association 10, beef \$2.50, pork \$2.00; association 18, beef \$2.00, pork \$1.50; association 16, \$1.75; association 19, \$1.25.^cLess than one-half cent per locker rented.^dService not offered by association. Income after cost of service.^eIncluded in cut, wrap, freeze, and grind income.^fAverage income per locker rented from each processing service computed on basis of lockers rented in associations furnishing the particular service. Total average income computed on basis of lockers rented in all associations.

Source: Audit reports of the associations.

FIGURE 3
AVERAGE INCOME AND EXPENSE, ILLINOIS COOPERATIVE LOCKER
ASSOCIATIONS, 1942-43 TO 1945-46



showing the smallest total income per locker in group III, reported the highest net savings of \$3.09 per locker rented for this group. Principal reasons for this apparently better showing made by this association were very low labor costs and a much lower depreciation rate than for the other associations.

Curing and smoking income, averaging \$2.11 per locker rented, was on the average the third largest source of revenue. Association 25 reported the highest income from this service, \$5.95 per locker rented. This association also ranked first in total income and second in net savings for the entire group. Its total processing income averaged \$20.12 per locker rented.

Slaughtering income for the limited number of associations providing this service averaged \$1.31 per locker rented. Increasing numbers of associations are interested in providing this additional service. Fruit and vegetable processing and freezing still are relatively unimportant as sources of income to the associations. Average income amounted to only 50 cents per locker rented. Four associations, however, reported incomes ranging from \$1.01 to \$1.34 per locker rented, which indicates some possibilities for increased revenue from this source, particularly during slack seasons of meat processing.

Poultry processing also is of minor importance in most associations, averaging only 40 cents per locker rented. Associations showing the highest income from this service were those in group I ranging from 51 cents to 74 cents per locker.

Inedible byproduct sales, including savings on hides, of 97 cents per locker rented was on the average the sixth largest source of revenue. This income ranged from 6 cents for association 32 to \$2.70 for association 5. In general, high income from inedible sales was received only by those associations providing a slaughtering service.

The detail with which the data are presented in this table provides the associations with a key to possible weaknesses in their operations. Those associations with relatively low income from one or more services might well give consideration to correcting some of their weaknesses and expanding their operations.

ANALYSIS OF EXPENSES BY ASSOCIATIONS

The detailed analysis of association expenses and net savings is presented in table 5. Salaries and wages absorbed 45 percent of total income and averaged \$11.60 per locker rented. Labor costs in group I averaged \$3.20 more than those in group II and \$5.08 more per locker rented than in group III. Some of this increased cost is due to greater volume handled and more services rendered and some of it is due to less efficiency in utilization of labor. The problem of labor costs and efficiency is discussed more fully in a later section of this report.

The second largest expense item is depreciation and rent. This cost item ranged from 85 cents per locker rented in association 19 to \$4.42 per locker in association 28, and averages \$2.81 per locker rented for the

Table 5. - Comparative analysis of expenses per locker rented for 32 Illinois cooperative locker associations 1945-46.

ASSOCIATIONS	SALARIES AND WAGES	POWER AND LIGHT	HEAT AND WATER	LAUNDRY	PLANT SUPPLIES	PLANT REPAIRS	LICENSES AND TAXES	BONDING AND INSURANCE	EDUCATIONAL AND PROMOTIONAL	DIRECTORS PER DIEM, LEGAL, AND AUDIT
Group I										
25.....	\$15.49	\$2.88	(a)	\$0.24	\$2.58	\$0.37	\$0.12	\$0.54	\$0.65	\$0.80
9.....	16.96	2.18	\$0.34	.20	1.36	.79	.71	.05	.11	.53
14.....	14.51	1.82	.70	.28	1.86	.30	.24	.49	.18	.69
10.....	13.08	1.81	.15	.16	1.31	.21	.31	.60	.20	.26
Average.....	14.66	1.98	.49	.23	1.65	.36	.31	.46	.23	.58
Group II										
15.....	11.60	1.91	.25	.42	2.00	.44	.05	.54	.36	.31
26.....	7.23	2.37	.49	.08	1.10	.74	.40	.39	.31	.57
24.....	11.55	2.29	(a)	.28	2.23	.74	.08	.49	.18	1.05
20.....	10.04	2.71	(a)	.08	1.20	.86	.45	.69	.27	.98
18.....	10.88	1.88	.37	.22	2.03	.54	.52	.51	.27	.52
13.....	10.22	2.83	.44	.24	1.78	1.13	.23	.28	.16	.39
8.....	8.14	1.63	.47	.07	.71	.80	.64	.20	.36	.63
30.....	11.34	2.59	.62	-	1.86	.86	.45	.52	.10	.56
1.....	11.19	1.72	.70	.21	1.59	.73	.51	.34	.17	.56
29.....	13.76	2.02	.21	.04	1.04	.32	.58	.38	.15	.40
11.....	13.45	2.25	.92	.06	1.07	.36	.21	.30	.40	.50
28.....	12.55	3.56	.80	.15	1.68	.76	.50	.59	.16	.91
2.....	12.53	1.65	.54	.18	1.80	.65	.59	.39	.38	.41
23.....	9.91	2.62	(a)	.13	1.77	.20	.27	.31	.14	.20
31.....	8.39	3.21	.69	.06	1.52	1.30	.52	.31	.14	.68
21.....	13.55	1.61	.71	.27	1.05	.48	.45	.31	-	1.20
5.....	12.48	2.81	(a)	.17	2.10	1.12	.51	.73	.26	.53
3.....	11.30	2.90	(a)	.15	1.06	1.12	.46	.28	.41	.32
22.....	16.72	3.06	.60	.28	2.88	.43	.69	.62	.33	.69
27.....	9.13	3.78	.13	.25	1.53	.98	.32	1.15	.09	.35
32.....	14.05	2.77	1.42	.40	1.89	.44	.11	.38	.25	1.07
Average.....	11.46	2.33	.58	.17	1.59	.70	.43	.42	.29	.54
Group III										
19.....	6.73	1.18	.53	.16	1.25	-	.36	.26	.03	.35
12.....	11.61	2.63	.94	.14	1.18	.63	.33	.39	.15	.40
17.....	9.12	2.22	(a)	.20	1.31	-	.66	.30	.22	.34
7.....	7.45	2.61	(a)	.11	1.10	.43	.38	.25	.25	.57
6.....	8.90	2.62	(a)	.19	1.49	.73	.49	.48	.33	.17
16.....	10.20	1.85	.79	.20	1.02	.61	.38	.20	.11	.22
4.....	10.74	1.58	.69	.13	1.91	.45	.40	.35	.11	.57
Average.....	9.58	2.27	.81	.16	1.32	.58	.43	.34	.19	.41
Combined average.....	\$11.60	\$2.28	\$0.55	\$.16	\$1.54	\$0.64	\$0.41	\$0.41	\$0.26	\$0.52

Table 5. - Comparative analysis of expenses per locker rented for 32 Illinois cooperative locker associations 1945-46 - Continued.

ASSOCIATIONS	OFFICE SUP- PLIES AND EXPENSE	BAD DEBTS AND LOSSES	TRUCK, AUTO, AND MILEAGE	MISCELLANEOUS EXPENSE	DEPRECIATION AND RENT	TOTAL OPERATING EXPENSE	INTEREST EXPENSE	FEDERAL INCOME TAX	TOTAL EXPENSES	NET SAVINGS
Group I ^a										
25.....	\$0.89	-	\$0.14	\$0.05	\$3.24	\$27.79	\$1.04	\$2.59	\$31.42	\$8.67
9.....	.50	\$0.09	.15	.01	2.76	28.74	.28	1.15	28.17	3.98
14.....	1.02	.19	.69	.08	3.56	26.41	.56	.49	27.46	2.84
10.....	.28	-	.40	.25	2.65	21.67	.50	.62	22.79	1.85
Average.....	.75	.17	.47	.11	3.19	25.52	.57	.89	26.98	3.42
Group II										
15.....	.31	-	.19	.22	3.68	22.28	-	-	22.28	9.04
26.....	.39	.17	-	.15	2.13	16.52	.50	2.20	19.22	7.79
24.....	.60	.05	.11	.24	3.14	23.01	.81	-	23.82	5.46
20.....	.30	-	.34	-	2.96	20.88	-	1.27	22.15	4.39
18.....	.44	(b)	.27	.01	2.12	20.90	.35	1.37	22.62	4.02
13.....	.38	-	-	.07	3.25	21.38	.35	1.23	22.96	3.70
8.....	.62	-	.14	.04	1.69	16.34	-	.95	17.29	2.83
30.....	.58	.21	.22	.10	3.00	23.01	.74	.80	24.55	2.79
1.....	.36	-	.26	.05	2.04	20.27	-	.87	21.14	2.73
29.....	.69	.41	.24	.11	3.14	23.65	.50	.74	24.89	2.51
11.....	.36	-	.48	.03	3.22	23.63	.19	.88	24.70	2.49
28.....	.37	.04	-	.15	4.42	26.64	.91	-	27.55	2.38
2.....	.58	.20	.07	(b)	3.09	23.06	.27	.73	24.06	2.26
23.....	.42	-	.03	.21	2.03	18.24	.21	.66	19.11	2.20
31.....	.34	.01	-	.07	2.69	19.93	.63	.85	21.21	1.94
21.....	.49	-	.18	.59	2.41	23.30	.62	-	23.92	1.84
5.....	.40	.09	1.07	.02	2.63	24.92	.41	.40	25.73	1.42
3.....	.48	-	.31	.16	2.72	21.67	.23	.27	22.17	.92
22.....	.34	.04	.18	-	3.60	30.26	.92	.10	31.28	.31
27.....	.73	.01	.12	.09	3.65	22.31	.94	-	23.25	(.14)
32.....	.74	.10	1.08	.07	2.91	27.48	.69	-	28.17	(1.98)
Average.....	.48	.13	.30	.11	2.71	21.93	.42	.81	22.95	2.67
Group III										
19.....	.09	-	-	.22	.85	12.01	-	1.03	13.04	3.09
12.....	.30	-	.21	.41	2.99	22.31	.13	.78	23.22	2.59
17.....	.43	-	.01	.19	3.14	18.14	-	.85	18.99	2.54
7.....	.40	-	.41	.15	1.77	15.88	.16	1.08	17.10	2.48
6.....	.56	-	.43	.23	2.99	19.61	-	.50	20.11	1.76
16.....	.45	.03	-	.12	4.29	20.81	-	.37	21.18	1.21
4.....	.32	-	.12	(b)	3.14	20.51	.03	.11	20.65	.33
Average.....	.38	.03	.24	.22	2.81	19.20	.12	.69	19.94	2.06
Combined average ^c	\$0.51	\$0.14	\$0.32	\$0.13	\$2.81	\$21.96	\$0.41	\$0.79	\$22.99	\$2.67

^aCombined with power and lights.

^bLess than one-half cent per locker rented.

^cAverage expense per locker rented for each particular item computed on basis of locker rented in associations having the particular expense. Total average computed on basis of lockers rented in all associations.

Source: Audit reports of the associations.

32 associations. Renting of facilities at varying rates and considerable variation in computing depreciation account for some of this difference. A few associations use a very low depreciation rate which not only reduces their operating costs but exaggerates their net savings. Another reason for higher depreciation costs of some of the associations is due to sharply increased costs of new facilities.

Table 6 shows the rather wide variation in depreciation rates charged by different associations. Depreciation on buildings ranges from 2 to 5 percent with the most common charges from $2\frac{1}{2}$ to 3 percent. On insulation the rates charged range from 5 to $7\frac{1}{2}$ percent with the most common at 5 percent. Where insulation and building rates are combined, the most common charge is 4 to 5 percent.

The widest variation occurs in depreciation on refrigeration equipment and on lockers. While the most common rate on refrigeration was 10 percent, this charge ranged from 5 to 10 percent with over half of the total under 8 percent. In the case of lockers, depreciation rates varied from 4 to 10 percent with half of them between 5 and 8 percent and a third at 10 percent. Rates on processing equipment were generally 10 percent although they ranged from 5 to 20 percent.

More uniform rates of depreciation for all associations would not only place them on a more comparable basis but would more accurately reflect actual depreciation costs.

Power and light costs which amount to approximately 10 percent of all expenses range from a low of \$1.18 per locker rented in association 19 to a high of \$3.78 in association 27 and averaged \$2.26 per locker rented for all associations. Variations in power rates, volume of products processed, and added services of some plants as contrasted to others account for much of this difference in cost. Inefficient insulation and refrigeration also contribute to the wide variation. The difference in power costs between association 19 and association 27 is \$2.60 per locker rented or \$1,300 in a 500-locker plant. From this analysis it would appear that associations 27, 28, 31, and 22 would be justified in investigating the cause of high power and light costs in their plants.

Plant supplies averaged \$1.54 per locker rented. The major items in this account are wrapping paper, twine, cartons, and curing and smoking supplies. These costs, as would be expected, varied quite closely with the volume and type of processing carried on by different plants.

SAVINGS

Net savings for the 32 associations averaged \$2.67 per locker rented. Group I realized an average of \$3.42 per locker rented owing to higher processing and locker rental rates, together with better than average volume processed per locker. Associations in group II averaged \$2.67 net savings per locker rented while associations in group III with the lowest average rental and processing rates averaged \$2.06 per locker rented.

When analyzed on a percentage basis (table 7) net savings for 32 associations averaged 14 percent of gross income before payment of income tax and interest and 10 percent after payment of these expenses. For the

Table 6. - Number of plants showing specified depreciation rates by major investment items, Illinois cooperative locker plants, 1945-46.

ITEM	2 PER- CENT	2 1/2 PER- CENT	3 PER- CENT	4 PER- CENT	5 PER- CENT	6 PER- CENT	6 2/3 PER- CENT	7 PER- CENT	7 1/2 PER- CENT	8 PER- CENT	8 1/3 PER- CENT	10 PER- CENT	15 PER- CENT	20 PER- CENT	TOTAL
Building.....	3	12	7		3										25
Insulation.....					15		4	1	2						22
Building and insulation.....		1	1	3	7										12
Refrigeration.....					5	1	5	2	10	2		16			41
Lockers.....				2	8	1	2		8	1	2	12			36
Cutting room equipment.....					1	1	1			1		25	7	1	37
Furniture and office equipment.....												29			29

Source: Audit reports of the associations.

Table 7. - Net savings as a percentage of gross income in 32 Illinois cooperative locker associations, 1945-46.

ASSOCIATION	GROSS INCOME	NET SAVINGS BEFORE INCOME TAX AND INTEREST		NET SAVINGS AFTER INCOME TAX AND INTEREST	
		AMOUNT	PERCENTAGE OF GROSS INCOME	AMOUNT	PERCENTAGE OF GROSS INCOME
15.....	\$14,314.64	\$4,132.01	28.87	\$4,132.01	28.87
26.....	19,984.10	7,757.51	38.82	5,763.09	28.84
25.....	26,576.46	8,149.77	30.66	5,747.06	21.62
19.....	6,421.66	1,642.95	28.58	1,232.21	19.19
24.....	29,516.38	6,321.70	21.42	5,502.65	18.64
20.....	17,386.42	3,707.11	21.32	2,879.06	16.56
18.....	32,238.13	6,951.46	21.56	4,859.60	15.07
8.....	20,941.16	3,928.50	18.76	2,946.37	14.07
13.....	19,809.78	3,923.09	19.80	2,749.82	13.88
7.....	20,679.54	3,903.39	18.88	2,617.46	12.66
9.....	24,108.92	4,056.81	16.83	2,981.62	12.37
17.....	21,442.95	3,372.74	15.73	2,529.56	11.80
1.....	38,293.51	5,781.47	15.10	4,382.70	11.44
23.....	41,567.12	5,990.64	14.41	4,282.59	10.30
30.....	15,093.81	2,394.55	15.86	1,540.49	10.21
12.....	41,452.03	5,618.66	13.55	4,158.45	10.03
29.....	24,031.05	3,289.74	13.69	2,201.27	9.16
11.....	34,316.55	4,494.95	13.10	3,142.40	9.16
14.....	76,753.47	9,408.11	12.26	6,731.00	8.77
2.....	68,991.02	8,562.91	12.41	5,931.76	8.60
31.....	8,567.59	1,194.00	13.94	720.48	8.41
6.....	22,479.51	2,324.31	10.34	1,805.13	8.03
28.....	9,935.97	1,091.96	10.99	789.13	7.94
10.....	29,888.20	3,604.24	12.06	2,247.43	7.52
21.....	17,000.00	1,625.63	9.56	1,216.12	7.15
16.....	12,314.00	867.26	7.04	664.79	5.40
5.....	45,987.57	3,779.43	8.32	2,408.12	5.30
3.....	44,231.00	2,714.79	6.14	1,751.49	3.96
4.....	17,369.36	390.89	2.25	272.27	1.57
22.....	15,130.09	633.71	4.19	145.65	.96
27.....	7,486.27	258.66	3.46	-47.26	-6.63
32.....	14,694.83	-721.17	-4.91	-1,107.94	-7.54
Total.....	839,003.09	121,151.78	-	87,176.58	-
Average.....	\$26,218.85	\$3,785.99	14.44	\$2,724.27	10.39

Source: Audit reports of the associations.

preceding year net savings of 25 of these associations averaged 12 percent of gross income before income tax and interest and 8.9 percent after payment. This increase in percent of savings realized is encouraging, especially when one takes into consideration that labor expenses have continued to rise. It indicates that more plants are being efficiently operated than was the case last year.

It is impossible to discuss fully the reasons for the relatively successful or unsuccessful operation of each association. In general, however, the substantial savings in associations 15, 26, and 24 are due to the large volumes of processing and other services rendered. Association 15 receives a substantial income from the chilling and processing of carcasses for local stores while associations 26 and 24 obtained sizable incomes from curing, smoking, and lard rendering.

In association 25 higher rental and processing charges contributed to its excellent earning record, but a sizable portion of its income came

from a variety of services such as curing and smoking; the processing of poultry, fruit, and vegetables; and the sale of fruits, vegetables, and inedible products.

Association 20 received a substantial part of its income from slaughtering. This association also received above-average returns from fruit and vegetable processing, from storage, and from sales of merchandise and inedibles. In association 19 much of its savings were due to exceptionally low labor costs and a very low depreciation rate, as volume processed was small and services rendered were limited.

Associations 5, 21, 22, and 32 with better than average income per locker rented realized less than average net savings because of high labor and operating costs. Two of these associations, 22 and 32, reported labor costs per locker rented from \$2.59 to \$5.26 over the average for all associations in group II, and both associations processed substantially less products than the average poundage for all associations. Associations 5 and 21 processed more than the average poundage but high labor costs were responsible for reduced net savings. The poor showing made by association 27, in spite of high locker rentals, was due to small volume processed.

Table 8 shows net savings as a percentage of gross income over the 6-year period, 1940-41 to 1945-46. Note the relatively high earnings made from 1940-41 through 1943-44 and the sharp decline in 1944-45.

Table 8. - Net savings as a percentage of gross income, Illinois cooperative locker associations, 1940-41 to 1945-46.

YEAR	NET SAVINGS BEFORE INCOME TAX AND INTEREST	NET SAVINGS AFTER INCOME TAX AND INTEREST
	<i>Percent</i>	<i>Percent</i>
1940-41.....	16.62	12.24
1941-42.....	20.51	15.59
1942-43.....	23.46	17.24
1943-44.....	18.02	13.31
1944-45.....	12.45	8.93
1945-46.....	14.44	10.39

Source: Audit reports of the associations.

During the first 3 years shown there was a substantial increase in the utilization of locker and processing facilities. In the latter part of this period most plants had all their lockers rented, and were using their processing facilities to capacity. The greater volume of product through the plants and the increase in rented lockers reduced fixed costs per unit and also resulted in increased efficiency in the use of labor.

During 1943-44 the cost of labor and management increased owing to the tight labor market and the inefficiencies of rapid labor turnover. In the following year, 1944-45, these unfavorable conditions persisted and were further aggravated by a decline in processing volume from 420 pounds to 384 pounds per locker rented.

In 1945-46 labor and management costs continued to increase but the additional cost was offset by the greater income resulting from increased volume and the addition of new processing services. The improvement shown in 1945-46 tends to indicate improved efficiency of plant operation.

Table 9. - Net savings as a percentage of investment in fixed assets before deduction of income tax and interest for 22 Illinois cooperative locker associations^a.

ASSOCIATIONS	FIXED ASSETS ^b	NET SAVINGS	NET SAVINGS AS PERCENTAGE OF FIXED ASSETS
15.....	\$12,997.57	\$4,132.01	31.79
26.....	37,157.20	7,757.51	20.88
25.....	43,894.56	8,149.77	18.57
13.....	21,359.30	3,923.09	18.37
9.....	27,826.46	4,056.81	14.58
20.....	^c 27,289.23	3,707.11	13.58
19.....	^d 12,621.30	1,642.95	13.02
18.....	55,654.41	6,951.46	12.49
7.....	34,972.02	3,903.39	11.16
16.....	8,003.59	867.26	10.84
24.....	^c 59,276.58	6,321.70	10.66
11.....	42,391.37	4,494.95	10.60
8.....	^c 37,465.23	3,928.50	10.48
1.....	63,167.39	5,781.47	9.15
2.....	101,569.80	8,562.91	8.43
30.....	31,447.29	2,394.55	7.61
23.....	^c 79,323.05	5,990.64	7.55
31.....	16,205.60	1,194.00	7.37
6.....	32,912.72	2,324.31	7.06
3.....	91,212.48	2,714.79	2.98
4.....	34,701.34	390.89	1.13
27.....	23,348.82	258.66	1.11
Total or average.....	\$894,797.31	\$89,448.73	10.00

^aDoes not include associations making major additions to facilities during their fiscal year unless no income was earned from new facility and the cost of such facility could be excluded from total fixed assets.

^bOriginal cost.

^cInvestment in plant under construction excluded.

^dDeposit on new equipment excluded.

Source: Audit reports of the associations.

INVESTMENT AND NET SAVINGS

In table 9 net savings before payment of income tax and interest are compared with the original cost of fixed assets. This table does not include associations making major additions to facilities during the fiscal year unless no income was earned from the new facility and the cost of such facility was excluded from total fixed assets. Thus, the data presented are an accurate measure of the savings per dollar invested in fixed assets for each association. Net savings as a percentage of investment before payment of income tax and interest ranged from 32 percent in association 15 to 1.1 percent in association 27 and averaged 10 percent for the group.

Those associations realizing the largest net savings as percentages of fixed assets were in general the same as those showing the largest net savings as percentages of gross income, although not in the same order. Associations 13 and 9 which were among the top 5 in net earnings as a percentage of fixed assets ranked ninth and eleventh in savings as a percentage of gross income, while association 24 dropped from fifth place in net savings as percentage of gross income to eleventh place in net savings as a percentage of fixed assets.

Table 10 shows a comparison for the 6-year period, 1940-41 to 1945-46, of net savings as a percentage of investment in fixed assets. Here again, the period 1941-42 through 1943-44 was the period of increasing net savings, while 1944-45 experienced the greatest decline. For the 6-year period, net savings averaged approximately 10.5 percent of the investment in fixed assets.

Table 10- - Net savings as a percentage of investment in fixed assets before deduction of income tax and interest, Illinois cooperative locker associations, 1940-41 to 1945-46.

YEAR	NET SAVINGS AS PERCENTAGE OF INVESTMENT
	<i>Percent</i>
1940-41.....	6.77
1941-42.....	11.20
1942-43.....	14.56
1943-44.....	12.98
1944-45.....	7.86
1945-46.....	10.00

Source: Audit reports of the associations.

PROCESSING VOLUME

Table 11 and figure 4 furnish data on the total pounds of meat and poultry processed for each association as well as the average pounds processed per locker rented. The 32 associations processed a total of 6,955 tons of meat and poultry and averaged 425 pounds per locker rented.

The extremely high poundage shown by association 15 includes 73,861 pounds of meat processed for other than locker patrons. Had this volume been deducted, it would lower this association's poundage per locker rented to

Table 11. - Lockers rented, estimated poundage, and average pounds of meat and poultry processed per locker rented in 32 Illinois locker cooperatives, 1945-46.

ASSOCIATION	LOCKERS RENTED ^a	ESTIMATED MEAT AND POULTRY PROCESSED	
		TOTAL POUNDS ^b	POUNDS PER LOCKER RENTED
15.....	457	^c 385,098	843
9.....	750	397,386	530
2.....	2,621	1,305,238	498
17.....	996	484,637	487
18.....	1,210	581,912	481
5.....	1,694	796,913	470
14.....	2,550	1,185,435	465
12.....	1,606	746,497	465
16.....	550	254,760	463
4.....	828	382,307	462
25.....	663	295,664	446
26.....	740	329,355	445
21.....	660	282,866	429
11.....	1,262	531,328	421
28.....	332	139,384	420
19.....	398	165,346	415
1.....	1,604	656,060	409
10.....	1,213	493,896	407
6.....	1,028	416,448	405
24.....	1,008	407,596	404
13.....	743	298,844	402
23.....	1,951	751,484	385
31.....	370	141,720	383
32.....	561	205,249	366
22.....	479	172,261	360
3.....	1,916	668,977	349
29.....	877	303,911	347
30.....	552	188,386	341
7.....	1,056	337,001	319
27.....	324	101,708	314
8.....	1,041	321,962	309
20.....	655	180,857	276
Total or average.....	32,695	13,910,466	425

^aLockers rented computed by dividing earned locker rental income by average rental rate. Includes temporary lockers.

^bTotal poundage secured from association records or computed by dividing chill, cut, wrap, freeze, and grind income by rate for this service.

^cIncludes 73,861 pounds processed for other than locker patrons.

Source: Field survey.

681 pounds and the average for the entire group to 423 pounds per locker rented. Data for the preceding year indicate that 25 of these associations processed approximately 384 pounds per locker rented.

FIGURE 4

AVERAGE POUNDS OF MEAT & POULTRY PROCESSED PER LOCKER RENTED PER YEAR, 32 ILLINOIS COOPERATIVE LOCKER ASSOCIATIONS, 1945-46



Pounds of meat and poultry processed varied from a high of 843 pounds per locker in association 15 to a low of 276 pounds in association 20. Twenty-one associations processed over 400 pounds per locker rented while only one association processed less than 300 pounds per locker.

Figure 5 shows the pounds of meat, poultry, fruits, and vegetables processed per locker rented per month for a representative group of plants. Meat processing averaged over 40 pounds per locker rented per month from January through April. Beginning with May the volume of meat processed declined each month until in September an average of only 25 pounds was being processed per month. During the last 3 months of the year volume increased to 28 pounds per month in November and December.

The heavy months of poultry processing were from August through November, the months of low beef and pork processing. Therefore, increased emphasis on poultry processing would help the associations maintain their level of income during the slack summer and fall months.

Fruit and vegetable processing was heaviest during June when 10.8 pounds were processed per locker rented. July and August were also relatively heavy months with 4.5 pounds and 5.6 pounds, respectively. As with poultry, the revenue from fruits and vegetables during the months of low beef and pork processing helps the associations maintain monthly revenue.

LABOR AND MANAGEMENT EFFICIENCY

Labor and management costs account for an average of 50 percent of all expenses in the 32 associations analyzed in tables 4 and 5. The percentage varies from 37 percent in association 26 to 60 percent in association 9. There are also wide variations in labor and management costs among the individual plants of an association. For this reason it seems advisable to devise some means of measuring the efficiency of labor within the individual plants. Monthly variations in volume have a direct influence on labor costs, thus the data on labor and management cost are further analyzed on a monthly basis.

In making this comparative analysis of labor and management cost per dollar of processing income, it is recognized that part of the cost of labor and management should be charged to sales and the operation of the locker room. These items, however, were excluded because:

1. The amount of labor chargeable to the locker room is relatively insignificant.
2. Average locker rental rates vary as much as \$4 per locker between associations and this variation would detract from the value of the comparison.
3. Locker rental income comprises approximately one-half of total income; thus, if rental income were included it would obscure the monthly variations in processing income.
4. The price received per pound for inedible sales and the mark-up on products merchandized vary by associations, thus introducing an additional variable into the analysis.

Although there may be some error in this method of analysis, it is felt that processing income provides the most satisfactory basis for measuring labor and management efficiency in these plants.

FIGURE 5
POUNDS OF MEAT, POULTRY, FRUITS, AND VEGETABLES PROCESSED
PER LOCKER RENTED, BY MONTHS, 1945-46

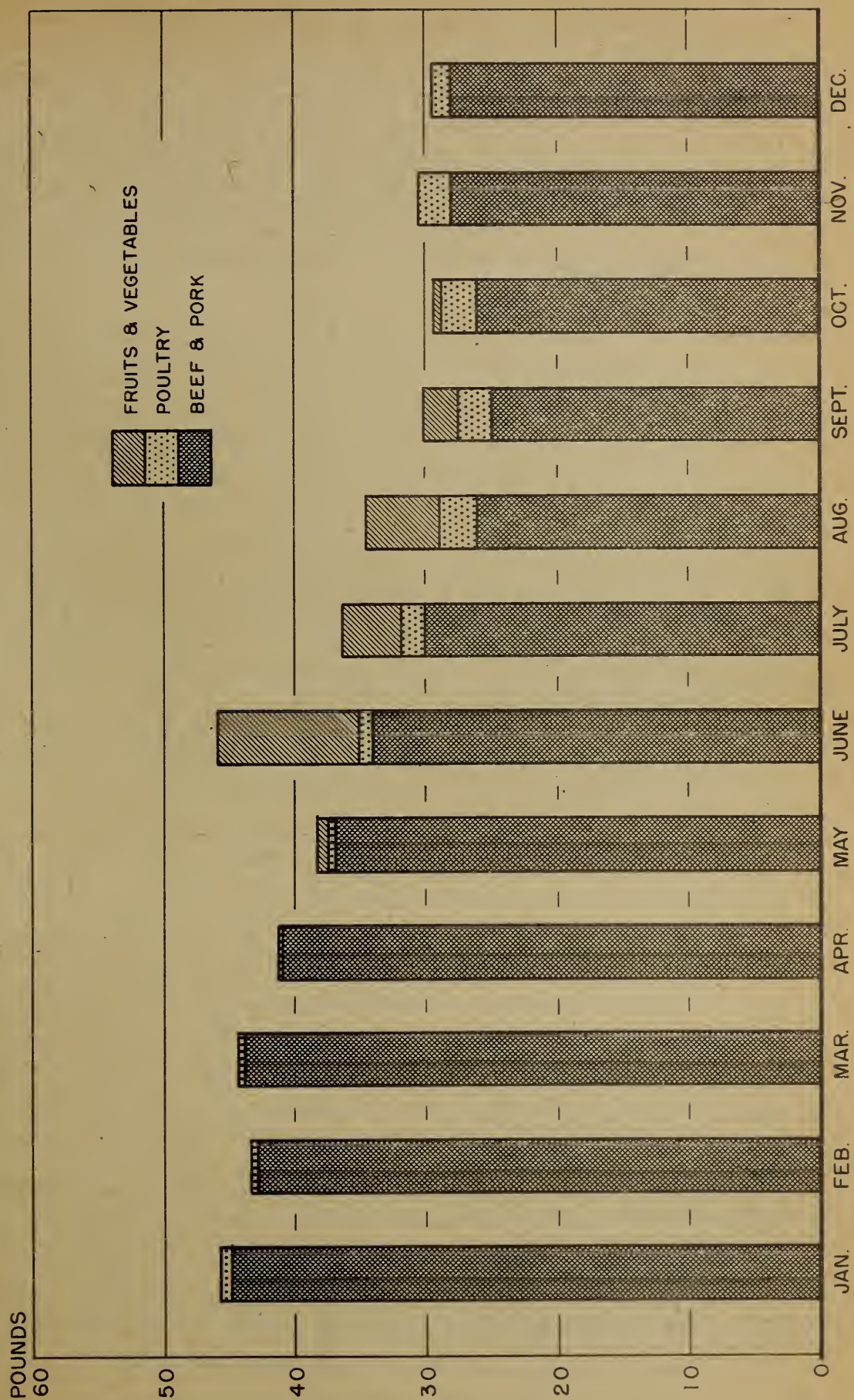


Table 12 is designed so that labor and management efficiency can be compared between plants having the same charge for cutting, wrapping, freezing, and grinding and offering approximately the same processing services. The plants charging \$2.50 per 100 pounds for chilling, cutting, wrapping, freezing, and grinding are shown in group I; those charging \$2 per 100 pounds are shown in group II; and those charging \$1.50 per 100 pounds in group III. The plants are then further grouped according to the service offered so that plants of the same general type would be shown together. For example, those plants offering only chilling, cutting, wrapping, freezing, and grinding service are shown together. Those offering additional service such as curing, smoking, or lard rendering are shown in another group, while plants furnishing slaughter service are shown in still another group.

Where an association operated two or more plants under county management, the overhead management and bookkeeping costs were allocated to the various plants according to the gross processing income of each plant. Plants that cured and smoked or rendered lard for other plants in the association were credited with three-fourths of the income from curing and smoking and two-thirds of the income from rendering. The remainder of the income was credited to the plant not performing the service as its income for such labor as was performed and for acting as agent for the patron.

The data in table 12 indicate that in general the plants realized greater efficiency in the use of labor and management than last year. (See also table 13.) Total cost for labor and management for 1945-46 was 92 cents per dollar of processing income compared with \$1.01 per dollar of processing income in 1944-45. Furthermore, labor and management cost exceeded processing income in only 3 months of the year compared with 6 months of last year.

September was the most unfavorable month, with \$1.25 spent for labor and management for each dollar received for processing. (See also fig. 6.) In the preceding year this cost for September amounted to \$1.53.

The most favorable month was January when only 69 cents was spent for labor and management for each dollar of processing income. In general, the first 6 months of the year, January through June, were the most profitable months for the processing department. (Fig. 7.) High volume of beef and pork during the early months of the year supplemented by poultry, fruits, and vegetables during the latter part of this period are the reasons for the low labor and management costs per dollar of processing income for the 6 months. During the last 6 months beef and pork volume declined further, and fruit and vegetable volume was also small. Poultry volume, even though relatively heavy in these months, did not compensate for the decline in other products processed. More emphasis on the processing of poultry during these slack months would help materially to reduce labor and management costs per dollar of processing income.

For the plants charging \$2.50 per 100 pounds for chilling, cutting, wrapping, freezing, and grinding the average cost of labor and management was 98 cents per dollar of processing income. Plant 25-A averaged 74 cents and in only 2 months did this cost exceed \$1.

The 5 plants in this group furnishing slaughter service at the farm paid an average of \$1 for labor and management for each dollar of processing income. The cost ranged from 91 cents to \$1.15. Plant 14-B which averaged \$1.15 had costs exceeding \$1 in 8 out of 12 months.

Table 12. - Labor and management cost per dollar of processing income, by months, 1945-46.

PLANT AND SERVICES ^a	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
Group I ^b :													
Cut, wrap, freeze, and grind:													
10-C.....	\$0.82	\$0.83	\$0.98	\$1.10	\$1.22	\$2.47	\$1.86	\$1.71	\$2.04	\$2.04	\$1.40	\$1.57	\$1.31
Cut, wrap, freeze, and grind (render and/or cure and smoke):													
25-A.....	.72	.85	.50	.57	.67	.73	.95	1.09	1.16	.71	.60	.83	.74
10-A.....	.91	.79	1.28	1.18	1.28	1.58	1.07	1.38	1.04	.89	1.16	1.07	1.10
Average.....	.79	.82	.77	.78	.91	1.05	1.01	1.23	1.10	.79	.86	.96	.90
Cut, wrap, freeze, grind, and slaughter (render and/or cure and smoke):													
14-D.....	.76	.99	1.02	.98	.74	.65	.69	2.04	1.60	1.03	1.04	1.19	.91
9-A.....	.61	.75	.72	.82	1.02	.87	1.08	1.12	1.32	1.08	1.18	1.25	.94
14-A.....	1.05	1.03	.95	.93	.84	.76	.85	1.08	1.01	1.05	1.21	1.26	.98
14-C.....	.79	1.02	1.21	1.34	1.44	.94	1.14	1.25	1.13	1.06	1.21	1.50	1.13
14-B.....	1.20	1.10	1.00	.99	1.11	.99	.86	2.12	1.17	1.15	1.82	1.49	1.15
Average.....	.81	.95	.94	.97	.97	.82	.89	1.32	1.20	1.08	1.23	1.32	1.00
Average group I.....	.81	.90	.89	.92	.96	.91	.94	1.30	1.19	.99	1.10	1.20	.98
Group II ^b :													
Cut, wrap, freeze, and grind:													
2-C.....	.64	.64	.88	.60	.62	.82	.94	.89	1.17	1.22	.97	.93	.81
2-A.....	.75	.77	.79	.84	.71	.78	.78	.94	1.10	1.01	.75	1.17	.84
1-C.....	.62	.79	.95	.77	.97	.86	.93	1.63	1.45	1.06	1.18	1.20	.95
5-A.....	.78	.87	1.17	.83	.84	1.09	.94	1.91	1.08	.93	.85	.96	.98
2-B.....	.73	.86	.93	.89	.80	.94	1.13	1.01	1.44	1.40	.94	1.18	.98
2-F.....	.95	.92	.85	.86	.84	.93	1.01	.90	1.38	1.22	1.02	1.57	.99
1-B.....	.74	.89	.95	.71	1.01	1.09	1.08	1.19	1.36	1.08	1.33	1.31	1.01
12-B.....	.79	.86	.88	.95	1.00	1.18	1.64	1.31	1.29	1.26	1.10	.83	1.03
1-A.....	.59	.86	1.23	.81	1.05	1.12	1.23	1.49	1.78	1.13	1.37	1.56	1.08
8-A.....	.66	1.01	1.03	.86	1.25	1.03	1.29	1.00	1.99	1.78	1.80	1.42	1.17
5-C.....	.98	.98	.99	.83	.96	1.00	1.61	1.68	1.40	1.80	1.35	1.10	1.17
11-D.....	1.26	.92	.95	.98	1.33	1.02	1.19	1.47	1.65	2.19	1.29	1.24	1.22
Average.....	\$0.76	\$0.86	\$0.95	\$0.82	\$0.91	\$0.98	\$1.09	\$1.20	\$1.40	\$1.28	\$1.10	\$1.18	\$1.01

^aNumerals refer to an association and its plants, lettered subdivisions refer to individual plants.
^bPlants grouped according to rate charged per 100 pounds for cut, wrap, freeze, and grind; group I, \$2.50; group II, \$2.00;
group III, \$1.50.

Table 12. - Labor and management cost per dollar of processing income, by months, 1945-46 - Continued.

PLANT AND SERVICES ^a	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
Group II ^b :													
Cut, wrap, freeze, and grind (render and/or cure and smoke):													
28-A.....	\$0.41	\$0.46	\$0.52	\$0.60	\$0.62	\$0.68	\$0.60	\$0.80	\$0.61	\$0.48	\$0.54	\$0.48	\$0.54
1-D.....	.47	.49	.64	.61	.53	.59	.65	.71	1.06	.93	.72	.93	.65
15-A.....	.56	.58	.59	.54	.87	.58	.54	.69	.93	.83	.74	.94	.68
18-A.....	.57	.53	.62	.67	.76	.71	.73	.68	.69	.73	.90	.66	.68
13-A.....	.43	.55	.97	.78	.58	.73	.59	1.08	1.27	.94	.91	1.00	.75
2-D.....	.62	.57	.62	.78	.69	.95	.72	1.07	1.45	.96	1.05	.88	.80
24-A.....	.57	.84	1.15	.79	.90	.73	.84	1.24	.68	1.19	.67	.91	.82
30-A.....	.55	.68	1.62	.96	.66	.95	.91	2.01	.94	.79	.61	.71	.85
11-A.....	.79	.73	.65	.62	.68	.73	.85	1.18	1.30	1.56	.97	1.05	.85
23-B.....	.77	.75	.82	.92	1.19	.80	.54	.80	1.67	.72	.85	.89	.88
2-E.....	.79	.73	.74	.67	.72	.87	.80	.79	1.16	1.28	1.23	1.11	.87
5-B.....	.68	.81	.88	.81	.72	.74	1.30	1.46	1.35	.61	.72	.76	.88
31-A.....	.49	.82	.58	1.16	1.53	.74	1.26	.89	.78	.80	1.48	1.56	.90
23-A.....	.74	.86	.86	.87	.87	.85	.89	.83	1.84	.90	.92	1.03	.90
23-C.....	1.03	1.02	.92	1.20	.97	.92	.76	.74	2.31	.85	1.08	1.32	1.05
3-A.....	.71	.91	1.15	1.78	1.21	1.14	1.84	1.47	2.31	1.11	1.20	1.32	1.18
3-B.....	.66	.95	.94	2.36	1.10	1.20	1.76	1.73	1.99	1.26	1.34	1.52	1.22
3-C.....	.76	.81	.88	1.54	1.39	1.22	1.97	2.00	2.65	1.38	1.94	1.47	1.28
Average.....	.62	.70	.79	.84	.82	.80	.86	1.07	1.17	.91	.89	.92	.84
Cut, wrap, freeze, grind, and slaughter (render and/or cure and smoke):													
28-A.....	.80	.71	.56	.73	.64	.70	1.01	1.27	.91	.91	.80	1.07	.78
29-A.....	.79	1.12	1.20	1.05	.93	.94	.81	.78	1.39	.68	.79	.65	.89
22-A.....	.33	.62	.88	.98	.76	1.20	3.08	3.06	1.67	1.21	.73	.30	.89
20-A.....	.68	.83	.65	1.26	.99	.92	.98	1.03	1.24	1.25	1.05	.97	.95
21-A.....	.78	.80	.74	.88	1.05	.99	1.13	.90	1.03	1.04	1.22	.92	.96
Average.....	.63	.66	.82	.97	.90	.96	1.17	1.17	1.24	.94	.92	.67	.90
Average group II.....	\$0.65	\$0.76	\$0.83	\$0.86	\$0.85	\$0.87	\$0.96	\$1.12	\$1.23	\$0.99	\$0.94	\$0.91	\$0.89

^aNumerals refer to an association and its plants, lettered subdivisions refer to individual plants.^bPlants grouped according to rate charged per 100 pounds for cut, wrap, freeze, and grind; group I, \$2.50; group II, \$2.00; group III, \$1.50.

Table 12. - Labor and management cost per dollar of processing income, by months, 1945-46 - Continued.

PLANT AND SERVICES ^a	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
Group III ^b													
Cut, wrap, freeze, and grind:													
17-B.....	\$0.43	\$0.53	\$0.76	\$1.77	\$0.87	\$0.85	\$0.78	\$1.29	\$1.25	\$1.04	\$1.05	\$1.10	\$0.90
4-A.....	.91	.82	.63	1.34	1.01	.96	1.91	1.59	1.67	1.13	1.94	1.33	1.13
17-A.....	.81	1.00	1.07	1.94	1.31	1.38	1.73	2.15	2.23	1.81	1.42	1.00	1.31
6-B.....	1.53	1.10	1.19	1.13	1.38	1.17	1.41	1.71	1.25	1.69	1.42	1.55	1.35
Average.....	.83	.88	.91	1.49	1.17	1.12	1.22	1.65	1.53	1.41	1.39	1.13	1.17
Cut, wrap, freeze, and grind (render and/or cure, and smoke):													
6-A.....	1.06	.65	.57	.53	.69	.83	.74	.73	.99	1.44	.88	.84	.77
4-B.....	.83	.73	.58	.87	2.16	1.16	2.08	2.03	2.03	1.67	1.50	.98	1.12
7-A.....	.81	.94	1.24	1.39	1.35	1.28	1.44	1.06	1.84	1.85	1.42	1.47	1.26
Average.....	.87	.78	.76	.87	1.22	1.11	1.25	1.09	1.54	1.67	1.26	1.10	1.05
Cut, wrap, freeze, grind, and slaughter (render and/or cure and smoke):													
12-A.....	.50	.72	.68	.69	.82	.80	1.21	.74	1.06	.77	.70	.55	.71
16-A ^c.....	.95	1.04	1.05	1.10	1.14	.78	.79	.80	1.41	1.11	1.42	1.13	1.04
Average.....	.63	.82	.79	.81	.91	.80	.99	.76	1.14	.92	1.01	.72	.82
Average group III.....	.76	.82	.81	.97	1.09	1.00	1.17	1.13	1.43	1.32	1.22	.98	1.01
Combined average.....	\$0.69	\$0.79	\$0.84	\$0.88	\$0.90	\$0.89	\$0.98	\$1.15	\$1.25	\$1.03	\$1.00	\$0.97	\$0.92

^aNumerals refer to an association and its plants, lettered subdivisions refer to individual plants.^bPlants grouped according to rate charged per 100 pounds for cut, wrap, freeze, and grind; group I, \$2.50; group II, \$2.00; group III, \$1.50.^cCut, wrap, freeze, and grind rate; \$1.75 per 100 pounds.

Source: Field survey.

FIGURE 6
LABOR AND MANAGEMENT COST COMPARED WITH PROCESSING INCOME
ILLINOIS COOPERATIVE LOCKER PLANTS, 1945-46

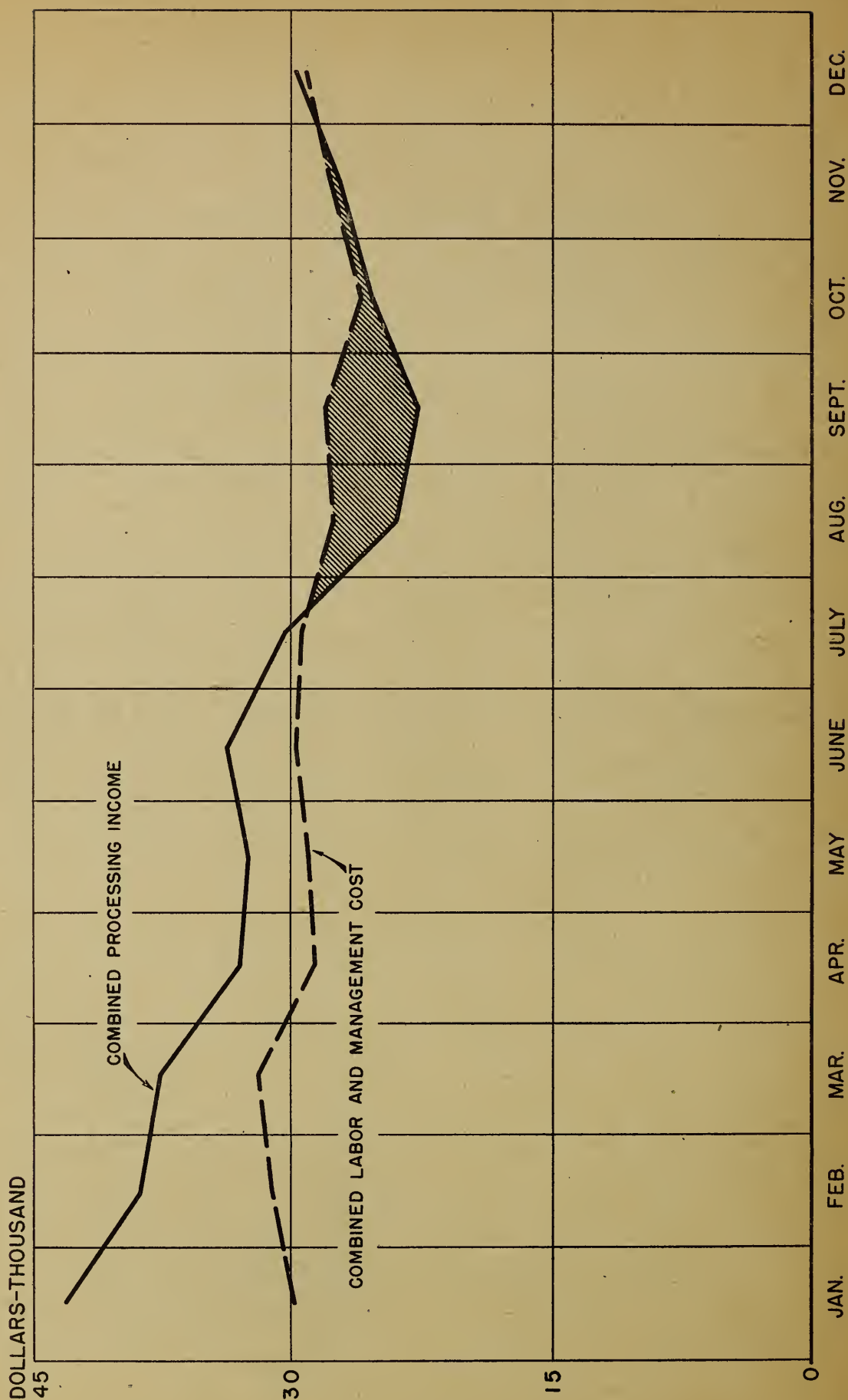


FIGURE 7

LABOR AND MANAGEMENT COST PER DOLLAR OF PROCESSING INCOME ILLINOIS COOPERATIVE LOCKER ASSOCIATIONS, 1943-44 TO 1945-46

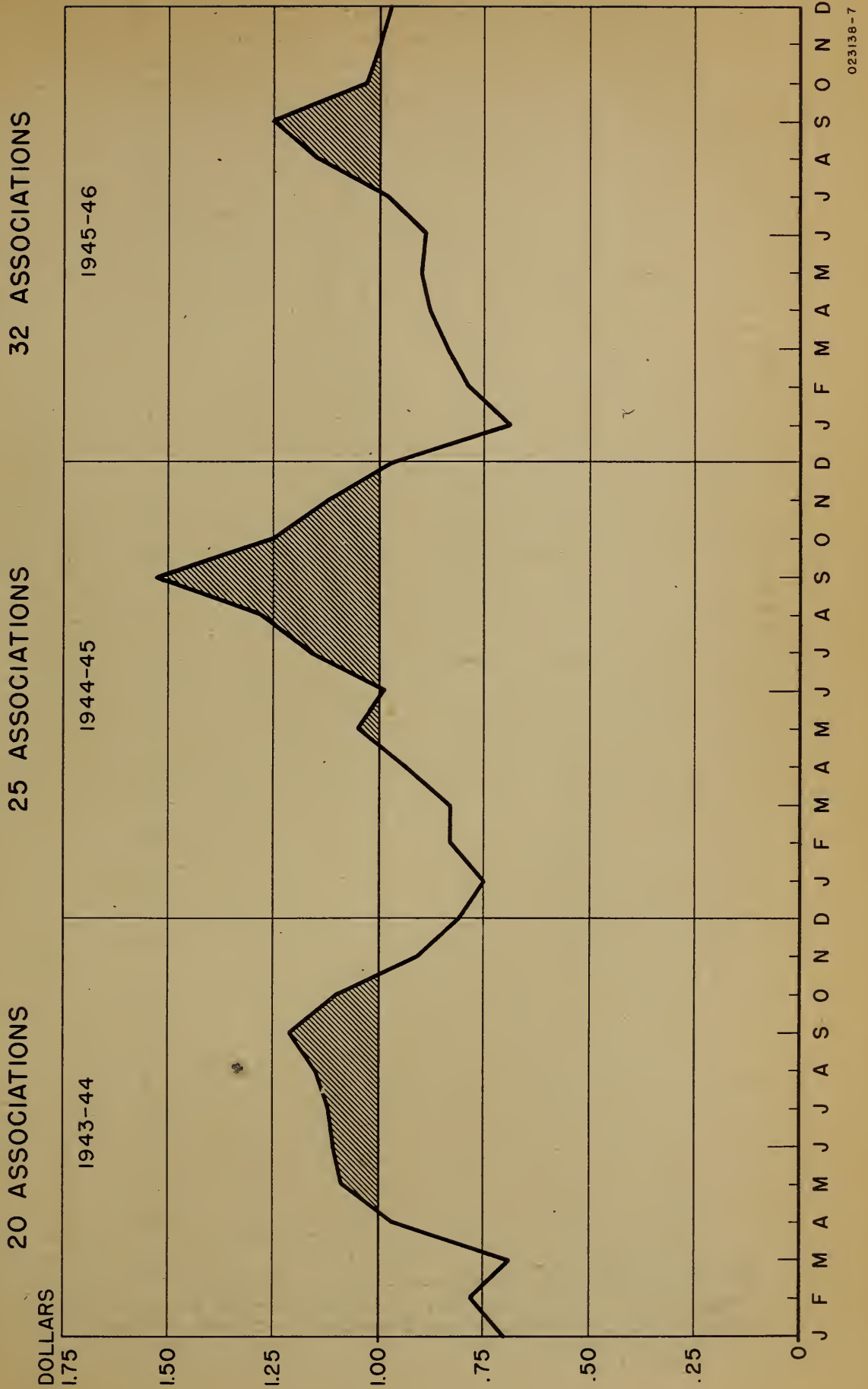


Table 13. - Labor and management cost per dollar of processing income, in 32 Illinois cooperative locker plants, 1943-44, 1944-45, and 1945-46^a.

PLANT ^b	1943-44	1944-45	1945-46
15-A.....	\$0.58	\$0.78	\$0.66
5-A.....	.64	.90	.98
6-A.....	.69	.92	.77
2-D.....	.72	.81	.80
11-A.....	.73	.88	.85
1-D.....	.73	.73	.65
5-B.....	.74	.90	.88
12-A.....	.77	.71	.71
18-A.....	.79	.82	.68
23-A.....	.81	.85	.92
2-C.....	.84	.83	.81
2-A.....	.85	.84	.84
23-C.....	.88	.84	1.05
6-B.....	.90	1.25	1.35
2-E.....	.90	1.03	.87
2-B.....	.95	1.02	.98
23-B.....	.96	.82	.86
1-C.....	.98	1.06	.95
9-A.....	1.01	1.17	.94
17-B.....	1.02	.93	.90
3-A.....	1.03	1.09	1.18
1-A.....	1.04	1.12	1.08
17-A.....	1.05	1.23	1.31
3-B.....	1.05	.99	1.22
4-A.....	1.06	1.25	1.13
2-F.....	1.10	1.20	.99
1-B.....	1.13	1.16	1.01
8-A.....	1.19	1.26	1.17
7-A.....	1.22	1.35	1.26
10-A.....	1.27	1.49	1.10
13-A.....	1.29	1.14	.75
4-B.....	1.48	1.24	1.12
Average.....	\$0.92	\$0.99	\$0.92

^a Includes only those plants having complete processing income and labor cost data for the 3 years.
^b Numerals refer to an association and its plants, lettered subdivisions refer to individual plants.

Source: Field survey.

In group II where rates were \$2 per 100 pounds for cutting, wrapping, freezing, and grinding the average cost of labor and management was 89 cents per dollar of processing income. In only 2 months did the cost exceed \$1. This is in contrast with the average of group I where labor and management cost exceeded processing income in 4 out of 12 months and averaged 9 cents more per dollar of processing income than the plants in group II even though their rate for cut, wrap, freeze, and grind was 25 percent greater.

In group III where cut, wrap, freeze, and grind rates were \$1.50 per 100 pounds the average cost of labor and management was \$1.01 per dollar of processing income. In 6 of 12 months labor costs exceeded processing income. The low processing rate together with low volume in some plants contributed to this high cost.

In general the plants offering slaughter service have higher labor costs than those plants not offering this service but having curing, smoking, and rendering facilities. It should be pointed out, however, that only 4 plants out of a total of 12 provided slaughter service at the plant. A fair appraisal of labor and management efficiency in locker plants furnishing slaughtering service, however, will have to wait until such time as complete slaughter facilities are put into operation and reliable operating data are available.

Several general observations and conclusions can be drawn from this analysis of labor and management efficiency:

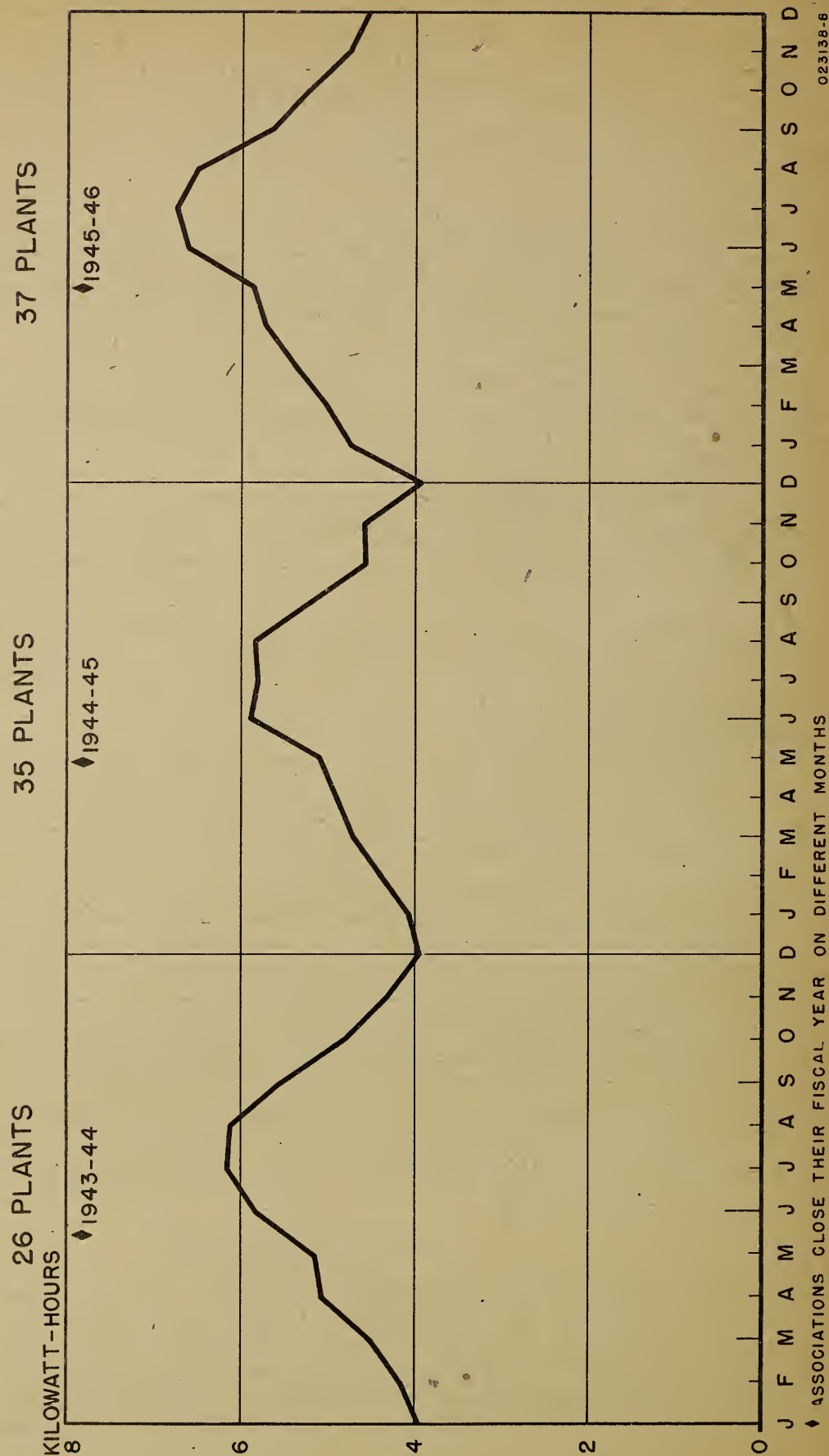
1. Most plants suffer from severe decline in processing volume during August, September, and October.
2. Greater emphasis needs to be placed on the processing of poultry during the slack summer and fall months.
3. Curing, smoking, and lard rendering services appear to be efficient operations which can increase savings.
4. Those plants furnishing slaughter service generally had higher labor and management costs per dollar of processing income than those plants furnishing only curing, smoking, and rendering service. Because of the fact that only one-third of the plants offering slaughtering service provided facilities at the plant, it should not be assumed that slaughtering is unprofitable. In those plants providing slaughtering facilities, labor costs at the plant were substantially lower than for those slaughtering on the farm.
5. Labor payments appear too inelastic. In other words, the monthly labor bill changes little compared to the wide fluctuation in monthly processing income. Greater use of part-time help may solve this problem.

POWER CONSUMPTION

Power and light costs are on the average the third largest expense item in locker-plant operation. These costs ranged from \$1.18 per locker rented in association 19 to \$3.78 per locker rented in association 27. (See table 5.) Owing to wide variation in power consumption between plants, a special monthly analysis was made of kilowatt-hour consumption per locker of capacity in 37 plants having complete monthly power data (table 14 and fig. 8).

FIGURE 8

AVERAGE KILOWATT-HOURS CONSUMED PER LOCKER, BASED ON TOTAL
LOCKER CAPACITY OF PLANTS, ILLINOIS COOPERATIVE
LOCKER PLANTS, 1943-44 TO 1945-46



Associations close their fiscal year on different months

023138-8

Table 14. - Kilowatt-hours of electricity used per locker, based on total capacity of 37 cooperative locker plants in Illinois, by months^a.

PLANT ^b	KILOWATT-HOURS OF ELECTRICITY USED PER LOCKER												TOTAL
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	
10-C.....	2.31	2.32	3.79	3.47	3.63	4.44	4.17	4.73	3.89	2.78	3.11	2.16	40.80
1-C.....	2.96	2.78	3.69	3.45	4.88	4.70	4.92	4.85	3.70	2.87	2.60	2.14	43.54
2-C.....	3.04	3.02	3.11	3.89	4.41	4.85	5.02	5.28	3.69	3.04	2.94	2.72	45.01
17-B.....	2.51	2.30	3.27	3.02	3.83	5.22	6.27	6.03	4.16	3.67	3.34	2.26	45.88
4-B.....	4.04	4.28	4.93	3.48	3.45	4.87	3.64	4.51	3.11	3.56	3.53	3.52	46.90
10-A.....	3.41	3.83	4.09	4.52	4.17	3.50	5.14	4.66	4.17	4.10	3.51	3.21	48.31
14-B.....	2.90	3.51	3.91	4.20	4.35	4.60	5.12	4.75	4.59	3.87	3.29	3.31	48.40
23-A.....	3.10	4.19	4.15	4.27	4.69	5.76	4.54	4.45	4.28	3.35	3.15	2.99	48.92
14-C.....	4.20	3.64	4.31	3.95	4.66	5.34	4.90	4.53	4.63	4.29	4.69	3.74	52.88
23-C.....	3.11	4.61	4.43	4.31	5.46	5.76	6.51	4.99	5.08	4.05	3.32	3.12	54.75
1-A.....	3.71	4.27	5.40	4.34	5.43	5.64	6.04	5.85	4.88	4.23	2.90	3.02	55.51
23-B.....	3.71	4.25	5.27	4.82	5.76	6.55	5.79	4.69	5.76	3.92	3.44	3.89	56.81
21-A.....	3.54	4.08	3.98	5.05	5.06	6.20	6.97	6.00	6.32	4.78	4.28	4.64	60.90
1-B.....	4.49	5.38	4.95	4.10	5.28	6.10	6.10	5.88	4.48	5.59	4.15	4.40	60.90
17-A.....	5.42	5.32	5.04	4.44	5.15	5.83	6.48	6.02	4.24	4.92	4.94	4.78	61.23
18-A.....	4.54	4.70	5.19	5.28	5.00	6.24	6.24	6.02	5.92	4.15	4.52	5.09	63.22
4-A.....	4.23	5.11	6.48	4.86	5.83	6.46	6.09	7.56	5.75	4.83	3.14	3.85	64.19
14-D.....	5.52	5.87	6.81	6.39	5.85	6.80	6.64	3.46	2.93	4.70	5.52	5.64	66.13
5-C.....	4.07	4.47	5.03	6.70	5.53	5.47	7.79	7.17	7.04	5.43	3.78	4.06	66.54
24-A.....	4.49	4.78	4.96	6.11	6.80	7.18	7.05	7.29	4.09	5.24	4.51	4.48	66.76
25-A.....	4.91	5.34	4.80	5.76	4.93	6.62	6.65	6.76	7.16	6.03	4.81	4.66	68.45
5-B.....	5.16	3.95	5.12	5.11	6.21	6.76	7.72	7.41	6.48	6.88	6.01	6.02	72.61
12-A.....	6.08	6.05	5.39	7.28	7.30	6.28	6.48	7.22	5.92	5.84	4.93	4.26	73.08
7-A.....	3.33	4.12	5.73	8.24	7.22	9.80	6.06	6.56	6.66	7.36	5.71	3.57	74.38
8-A.....	6.01	6.36	6.85	6.40	5.91	6.28	7.19	7.15	6.74	5.89	6.11	4.29	75.18
2-D.....	5.76	6.25	7.57	6.45	6.57	8.82	7.96	7.89	6.27	5.26	5.01	5.29	77.10
6-A.....	4.86	5.66	6.16	6.34	7.52	7.56	10.17	9.95	5.81	4.53	4.50	4.22	77.28
20-A.....	5.95	6.03	6.43	7.05	6.71	8.24	7.09	8.86	6.50	6.11	4.93	5.33	79.23
2-E.....	6.03	5.77	5.77	7.67	7.73	7.96	8.47	8.51	5.61	5.42	5.42	5.89	80.05
30-A.....	6.06	6.32	6.67	6.91	7.37	7.58	7.59	7.53	7.39	6.65	6.02	5.80	81.89
15-A.....	6.00	5.32	5.48	6.40	6.94	7.40	8.54	8.07	8.07	6.90	6.92	7.68	83.72
6-B.....	5.38	5.75	6.18	7.44	9.03	10.61	8.19	7.50	8.44	5.98	4.57	5.07	84.14
1-D.....	6.16	6.54	8.03	7.36	8.28	9.13	9.57	9.96	8.42	6.48	5.80	5.88	91.59
5-A.....	6.40	6.31	7.20	10.74	5.91	9.80	9.81	9.86	7.82	7.35	8.06	7.13	94.39
13-A.....	8.07	8.30	7.47	7.94	8.30	8.56	8.36	8.93	6.96	7.42	8.14	8.26	96.71
31-A.....	8.24	6.97	7.45	7.18	7.50	10.90	10.85	8.25	9.23	8.03	7.55	6.22	98.40
28-A.....	9.33	10.53	8.01	8.13	8.04	8.86	9.44	11.20	10.00	9.36	7.16	7.16	107.22
Average.....	4.78	5.03	5.40	5.72	5.89	6.02	6.76	6.50	5.64	5.24	4.76	4.56	66.90

^aPlants that expanded during the year were excluded.

^bNumerals refer to an association and its plants; lettered subdivisions refer to individual plants.

Source: Field survey.

Table 15. - Number of plants operating, total locker capacity of plants, average locker rental rates, and processing charges per pound in 32 Illinois cooperative locker associations, 1945-46.

ASSOCIATION	PLANTS OPERATED	TOTAL LOCKER CAPACITY	AVERAGE LOCKER RENTAL RATES	CHILL, CUT, WRAP, FREEZE, AND GRIND	CURE AND SMOKE	RENDER LARD	FRUIT AND VEGETABLE FREEZING	
							PINT	QUART
	<i>Number</i>	<i>Number</i>	<i>Dollars</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
1.....	4	1,615	10.20	2	4	3	^a 1	-
2.....	6	2,599	11.49	2	4	2	1	2
3.....	3	1,960	13.00	2	3	2	^a 2	-
4.....	2	845	10.80	1½	4	-	1	2
5.....	3	1,890	11.57	2	(b)	-	2	2
6.....	4	1,012	12.00	1½	4	3	2	3
7.....	3	1,093	11.98	1½	(c)	1½	^a 1½	-
8.....	1	965	12.60	2	-	-	2	3
9.....	2	756	12.40	2½	4	4	2	3
10.....	3	1,423	12.67	pork 2 beef 2½	5	-	2	2
11.....	5	1,262	11.71	2	4	3	2	3
12.....	4	1,772	12.84	1½	4	2	2	4
13.....	1	806	12.60	2	6	3	2	3
14.....	4	2,941	12.53	2½	5	-	^a 2½	-
15.....	1	445	12.20	2	3	(c)	1	2
16.....	1	503	10.33	1½	(c)	-	2	3
17.....	2	1,106	12.00	1½	(c)	(c)	1	2
18.....	3	1,336	12.33	pork 1½ beef 2	3	3	2	3
19.....	1	614	10.20	1¼	-	-	-	2½
20.....	2	668	12.51	2	-	-	2	3
21.....	2	830	10.00	2	3	3	2	3
22.....	1	600	12.67	2	-	2	1	2
23.....	3	1,853	10.57	2	2½	-	2	3
24.....	1	1,119	13.33	2	4	3	^a 2	-
25.....	1	746	13.14	2½	5	3	^a 2	-
26.....	1	736	12.67	2	3	2	^a 2	-
27.....	1	376	13.50	2	3	-	2	3
28.....	1	342	12.67	2	4	3	2	3
29.....	1	1,129	12.29	2	3	2½	2	3
30.....	1	528	12.40	2	3	2	^a 2	-
31.....	1	376	12.67	2	-	2	^a 2	-
32.....	2	966	13.89	2	3	-	2	3

^aPer pound.

^bUnit or piece basis.

^cCommission

Source: Field survey.

The term "locker of capacity" means the number of lockers that can be installed in existing zero-temperature rooms whether or not the lockers are actually installed. On the average each locker required 13.6 cubic feet of zero space.

These data indicate that power consumption ranged from 41 to 107 kilowatt-hours per locker of capacity per year and averaged nearly 67 kilowatt-hours per locker per year. This represents an increase of approximately 8 kilowatt-hours per locker over last year.

The 10 plants with the lowest power consumption ranged from 41 to 55 kilowatt-hours per locker per year. Nine of the 10 plants processed for their lockers only; 1 plant processed for additional lockers in a branch plant. Three plants had facilities for curing.

The 10 plants with the highest power consumption ranged from 79 to 107 kilowatt-hours per locker per year. Nine plants processed for their lockers only. One plant processed a large volume for other than locker patrons. Five plants had curing facilities, of which 1 plant cured for 3 other plants in the association.

Little information is available on the type of refrigeration equipment used. It was found, however, that all 10 plants with low power consumption used ammonia equipment while among the 10 high power-consuming plants, 2 of the 3 highest consumers (plants 13-A and 31-A) used Freon equipment.

It is believed that the major cause of high power consumption in most plants is due to faulty installation or deterioration of insulation, unbalanced or poorly installed refrigeration equipment, or unsatisfactory water conditions.

The great difference in power consumption among the plants indicates that some plants are very inefficient in the use of power. The boards of directors and plant managers of these plants should have the equipment and insulation checked for defects and the necessary overhauling and repairing done in order to reduce these high power costs.

